

# NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



## THESIS

### NORWEGIAN SECURITY POLICY AND NEW ENVIRONMENTAL CHALLENGES

by

Timothy J. Grout

March, 1996

Thesis Advisor:

Rodney Kennedy-Minott

Approved for public release; distribution is unlimited.

19960508 143

THIS DOCUMENT IS UNCLASSIFIED

# REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.

1. AGENCY USE ONLY (Leave blank)

2. REPORT DATE  
March 1996

3. REPORT TYPE AND DATES COVERED  
Master's Thesis

4. TITLE AND SUBTITLE NORWEGIAN SECURITY POLICY AND NEW ENVIRONMENTAL CHALLENGES

5. FUNDING NUMBERS

6. AUTHOR(S) Grout, Timothy J.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  
Naval Postgraduate School  
Monterey CA 93943-5000

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.

12a. DISTRIBUTION/AVAILABILITY STATEMENT  
Approved for public release; distribution is unlimited.

12b. DISTRIBUTION CODE

13. ABSTRACT (maximum 200 words)

The evolution of Norwegian security policy is a result of the evolving post-Cold War political order in Europe and the relationship that Norway has vis-a-vis its neighbors. A new set of priorities is emerging. With the end of the Cold War the factors which influenced the security policies of Norway since World War II have changed to include more non-traditional factors. In the past, Norway's security concerns were primarily dictated by the military threat from the Soviet Union. Now, as the twenty-first century approaches, the former Soviet Union does not pose an immediate military threat. However, the Arctic still remains strategically important for Norway and NATO. These new priorities emphasize a foreign and security policy which stabilizes the region through political and economic aspects vice military means. This change however does not delete the traditional emphasis on the military aspects.

Environmental degradation is one aspect of the non-traditional influences with which Norway is now concerned. The presence of a decaying Russian (former Soviet Union) nuclear submarine fleet coupled with the largest concentration of nuclear reactors in the world in the Kola Peninsula region pose a threat to Norway. Environmental issues have come to the forefront of Norwegian security and foreign policy concerns and in response, Norway has become a leader in emphasizing the importance of addressing environmental problems internationally.

14. SUBJECT TERMS Norway, Security Policy, Environmental Degradation, Environmental Security

15. NUMBER OF PAGES 95

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT  
Unclassified

18. SECURITY CLASSIFICATION OF THIS PAGE  
Unclassified

19. SECURITY CLASSIFICATION OF ABSTRACT  
Unclassified

20. LIMITATION OF ABSTRACT  
UL

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)  
Prescribed by ANSI Std. Z39-18 298-102



Approved for public release; distribution is unlimited.

**NORWEGIAN SECURITY POLICY  
AND NEW ENVIRONMENTAL CHALLENGES**

Timothy J. Grout  
Lieutenant , United States Navy  
B.S., SUNY Maritime College, 1988

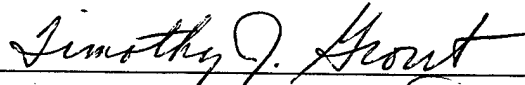
Submitted in partial fulfillment  
of the requirements for the degree of

**MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS**

from the

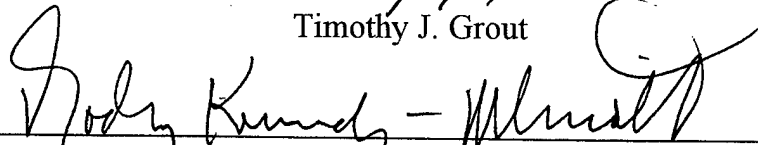
**NAVAL POSTGRADUATE SCHOOL  
March 1996**

Author:

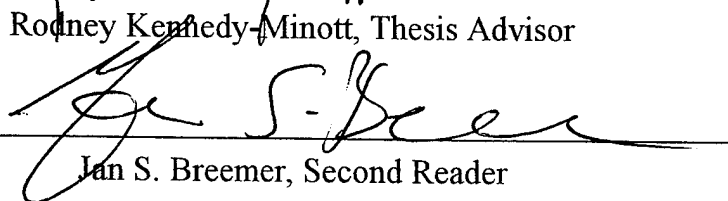


Timothy J. Grout

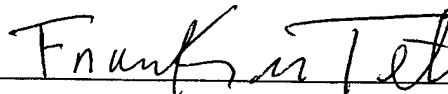
Approved by:



Rodney Kennedy-Minott, Thesis Advisor



Jan S. Breemer, Second Reader



Frank M. Teti, Chairman

Department of National Security Affairs



## **ABSTRACT**

The evolution of Norwegian security policy is a result of the evolving post-Cold War political order in Europe and the relationship that Norway has vis-a-vis its neighbors. A new set of priorities is emerging. With the end of the Cold War the factors which influenced the security policies of Norway since World War II have changed to include more non-traditional factors. In the past, Norway's security concerns were primarily dictated by the military threat from the Soviet Union. Now, as the twenty-first century approaches, the former Soviet Union does not pose an immediate military threat. However, the Arctic still remains strategically important for Norway and NATO. These new priorities emphasize a foreign and security policy which stabilizes the region through political and economic aspects vice military means. This change however does not delete the traditional emphasis on the military aspects.

Environmental degradation is one aspect of the non-traditional influences with which Norway is now concerned. The presence of a decaying Russian (former Soviet Union) nuclear submarine fleet coupled with the largest concentration of nuclear reactors in the world in the Kola Peninsula region pose a threat to Norway. Environmental issues have come to the forefront of

Norwegian security and foreign policy concerns and in response, Norway has become a leader in emphasizing the importance of addressing environmental problems internationally.

## TABLE OF CONTENTS

I. INTRODUCTION .....	1
II. NORWAY'S SECURITY POLICY .....	5
A.    ORIGINS .....	5
B.    1905-WORLD WAR I .....	8
C.    INTER-WAR PERIOD AND WORLD WAR II .....	10
D.    COLD WAR .....	25
E.    POST-COLD WAR .....	34
III. ENVIRONMENTAL ISSUES .....	39
A.    NON-MILITARY SECURITY ISSUES .....	39
B.    ORIGINS OF POLLUTION .....	43
1.    Kola Peninsula .....	44
2.    Barents and Kara Seas .....	48
3.    Novaya Zemlya .....	51
4.    Yenisey and Ob Rivers .....	52
C.    STORAGE FACILITIES .....	53
D.    REMEDIATION .....	54



IV. EURO-ATLANTIC ORGANIZATIONS .....	57
A.    OVERVIEW .....	57
B.    THE BARENTS EURO-ARCTIC COUNCIL .....	60
C.    NATO .....	63
D.    THE EUROPEAN UNION .....	65
E.    TACIS .....	67
F.    US SPONSORED PROGRAMS .....	69
 V. CONCLUSION .....	 71
 BIBLIOGRAPHY .....	 75
 INITIAL DISTRIBUTION LIST .....	 81

## EXECUTIVE SUMMARY

The evolution of Norwegian security policy is a result of the evolving post-Cold War political order in Europe and the relationship that Norway has vis-a-vis its neighbors. A new set of priorities is emerging. Originally, Norway's leaders believed that its isolation could guarantee neutrality. Norway, a small country, was thrust into the vortex of the strategic competition of the superpowers as a result of World War II and then the Cold War. It has taken Norway time in adapting to external constraints. World War II was truly the turning point which pushed Norway into an alliance with the Western powers and eventually NATO. Norway learned as a result of being defeated by the Nazi's that it could not stand alone. Thus, a security policy based on alliance, with self-imposed restraints on commitments, became the basis of Norwegian security policy until the end of the Cold War.

As in the past the change in external factors have reoriented the direction of Norway's security policy. In the past, Norway's security concerns were primarily dictated by the military threat from the Soviet Union. Now, as it looks to the twenty-first century, the former Soviet Union does not pose an immediate military threat. However, the Arctic still remains strategically important for Norway and NATO. The change emphasizes a foreign and security policy which stabilizes the region through political and economic aspects vice military means. This change however does not delete the traditional emphasis on the military aspects.

Environmental degradation is one security aspect of the non-traditional influences with which Norway is now concerned. The presence of a decaying Russian (former Soviet Union) nuclear submarine fleet coupled with the largest concentration of nuclear reactors in the world in the Kola Peninsula region pose a threat to Norway. These environmental issues have come to the forefront of Norwegian security and foreign policy concerns as well as Canada, Sweden,

Finland, the United States, Iceland, the British Isles and Greenland. Steven Greenhouse stated that in the United States Foreign Policy makers "are now looking at environmental threats today much in the same manner as they did military threats such as new surface-to-air missile sites alarmed policy makers several decades ago."

Under the leadership of Prime Minister Gro Harlem Brundtland, who headed the UN World Commission for the Environment and Development, Norway has become a leader in emphasizing the importance of addressing environmental problems which are legacies of the policies of the former Soviet Union and presently a distinct problem for Russia and its neighbors. The political, economic and societal changes that encompass Europe present the opportunity for stability and peace. Norway has taken this opportunity to focus its security policy on issues which until now have been overshadowed by the Cold War.

Norway's security concerns in post-Cold War Europe will continue, in part, to focus on Russia and its concentration of military assets on the Kola Peninsula. In addition, new security policies focusing on broader issues and not solely on preparing to repel a Russian invasion will be evident. For Norway, the environmental problems in Russia are so far reaching and affect so many countries that competition for attention and commitments from other nations will arise. Efforts to tackle the environmental problems and to integrate Russia into binding multilateral cooperation with a stable Europe, and to prevent political, economic, and social chaos from erupting, will be the primary concern of Norway's security agenda. Coordination between the different international and bilateral institutions will enhance Norway's position as a Nordic bridge between the US, Russia, NATO, and the EU.

Ecological threats do not respect political boundaries. While present environmental problems are of concern, it is the future threats to the environment which is where the emphasis needs to be placed. As the protective

containers and metal skins of these Russian reactors and barrels begin to corrode, they will spew their contents into the ocean. The feasibility of removing the reactors has been looked into, however, there is a chance that damage to a unit while trying to retrieve it could cause a leak or, worst case, cause a nuclear chain reaction. The upgrading and repairs to existing storage facilities must be emphasized. Russia continues to generate radioactive waste without the storage facilities to accommodate it. A nuclear incident on land can have more immediate effects than one in the ocean.

Once Russia accepts the responsibility for its past actions and makes a determined effort to make corrections, then the organizations which have offered their assistance, financial and technical, will be able to move forward. Working to ease the tensions and possibility of political conflict between Norway and Russia and ultimately preventing any future damage to the people of the region and the Arctic's fragile environment should be the goal. However, when the Russians continue to spend enormous amounts of money on operating a nuclear fleet and building new nuclear vessels, and then turn around and say that there is no funding available for building storage units and processing facilities, their credibility is questioned. There are still remains great strides to be taken in the area of environmental security in the northern region and it will ultimately require international cooperation to dispose of this threat.

## I. INTRODUCTION

The evolution of Norwegian security policy is a result of the evolving post-Cold War political order in Europe and the relationship that Norway has vis-a-vis its neighbors. A new set of priorities is emerging. Originally, Norway's leaders believed that its isolation could guarantee neutrality. Norway, a small country, was thrust into the vortex of the strategic competition of the superpowers as a result of World War II and then the Cold War. It has taken Norway time in adapting to external constraints. World War II was truly the turning point which pushed Norway into an alliance with the Western powers and eventually NATO. Norway learned as a result of being defeated by the Nazi's that it could not stand alone. Thus, a security policy based on alliance, with self-imposed restraints on commitments, became the basis of Norwegian security policy until the end of the Cold War.

In the wake of the Cold War the factors which had traditionally influenced the security policy of Norway have changed to encompass more non-traditional influences. Norwegian Minister of Foreign Affairs Johan Holst stated: "Foreign policy is no longer simply a question of relations between states. It is also a question about interaction between societies. It is also a question about

managing common problems. Therefore it is natural that foreign policy becomes more democratically rooted, that it reflects wider commitment and a wider distribution of responsibility.”<sup>1</sup>

As in the past the change in external factors have reoriented the direction of Norway's security policy. In the past, Norway's security concerns were primarily dictated by the military threat from the Soviet Union. Now, as it looks to the twenty-first century, the former Soviet Union does not pose an immediate military threat. However, the Arctic still remains strategically important for Norway and NATO. The change emphasizes a foreign and security policy which stabilizes the region through political and economic aspects vice military means. This change however does not delete the traditional emphasis on the military aspects.

Environmental degradation is one security aspect of the non-traditional influences with which Norway is now concerned. The presence of a decaying Russian (former Soviet Union) nuclear submarine fleet coupled with the largest concentration of nuclear reactors in the world in the Kola Peninsula region pose a threat to Norway. These environmental issues have come to the forefront of Norwegian security and foreign policy concerns as well as Canada, Sweden, Finland, the United States, Iceland, the British Isles and Greenland. In the

---

<sup>1</sup>Holst cited in Johan Eriksson, "Security in the Barents Region: Interpretations and Implications of the Norwegian Barents Initiative", *Cooperation and Conflict*, vol. 30(3) 1995, p. 270.

United States Foreign Policy makers "are now looking at environmental threats today much in the same manner as they did military threats such as new surface-to-air missile sites alarmed policy makers several decades ago."<sup>2</sup>

Under the leadership of Prime Minister Gro Harlem Brundtland, who headed the UN World Commission for the Environment and Development, Norway has become a leader in emphasizing the importance of addressing environmental problems which are legacies of the policies of the former Soviet Union and presently a distinct problem for Russia and its neighbors.

This thesis will examine the origins and development of Norway's post-Cold War security policy and environmental factors which will influence future issues. This thesis in the process thus will also analyze the development of the different phases of Norway's security policy. By way of background, there will be an initial overview of the basis of Norway's security policy, following the time periods of: 1905 through World War I, the inter-war period and World War II, 1945-1947. Then will follow the Cold War, and the post-Cold War periods. The events in these time periods have influenced the decisions made by Norwegian policy makers in the evolution of Norway's security policy as it exists today. Finally, issues are discussed that may influence Norway's established security policy toward the end of this century and into the next.

---

<sup>2</sup>Steven Greenhouse, "The Greening of American Diplomacy," *New York Times*, October 8, 1995.

The next chapter will address the issue of environmental degradation as a security and foreign policy issue and why it is important to Norway's security needs. It will focus on environmental issues in the Arctic Region, specifically the Russian Kola Peninsula region which remains the most heavily fortified region world-wide. Attendant to the area are the effects of military and non-military sources of pollution which are of immediate concern to Norway and NATO.

Additionally, this thesis will examine the effects of the assistance provided by Euro-Atlantic organizations on the future of Norway's security policy, specifically in the environmental area. Emphasis will be placed on Norway's relationship with these institutions with reference to Russia. Focus will be placed on the following institutions: the European Union (EU), North Atlantic Treaty Organization (NATO), Technical Assistance to the Commonwealth of Independent States (TACIS), and the Barents Euro-Arctic Council. International assistance by the United States to Norway and Russia in the environmental field from disarmament related pollution problems will also be reviewed. Finally, this thesis will conclude with an analysis of how the situation in the Arctic region may have consequences which will have an impact on Europe and the United States as a whole.



## **II. NORWAY'S SECURITY POLICY**

### **A. ORIGINS**

The origins of contemporary Norwegian security policies can be traced back to the nineteenth century. Cultural factors have had a decisive impact on the development of Norway's foreign and security policies. Although the history of Norway as a sovereign country dates back only 100 years, there are several factors which are present in its security and foreign policies. Traditional factors include:

- predisposition to isolationism and neutrality
- geographical remoteness
- reliance on mobilization forces vice a large standing force and military assistance from outside
- desire to remain outside foreign entanglements
- preference to international arbitration vice military conflict as a means to an end
- reluctance to engage in alliances
- deterrence and reassurance as a basis of foreign and security policy
- preoccupation with a common border with a superpower

New post-Cold War factors may include:

- non-military issues (environmental) as foreign and security concerns
- presence of an unstable neighbor (politically and economically)

The Norwegian predisposition to isolationism and the feeling of geographical remoteness from European power politics were the most obvious features of its international security policy. It was during the nineteenth century, when Norway was in a union with Sweden with the status of an independent state, that a constitution was drafted. Formal adoption by the Norwegians occurred on 17 May 1814 and established a government with the right to levy taxes and national representation. During this period, Sweden was content to let the Norwegians control their domestic affairs but retained the right to dictate foreign policy for both countries. The Norwegian government had little to no authority in foreign affairs and no way of protecting its own interests. One issue that attributed to the break-up of the union between the two countries was the Norwegian desire to establish a separate consular service to serve Norway's interests abroad and its growing merchant fleet.

The basic elements of Norway's security and foreign policy have roots comparable to some of the principles of early American foreign policy. Norway's basic foreign policy fundamentals on isolationism and avoiding entanglement in European affairs are similar to those which formed the basis of American foreign policies in the nineteenth century. It was during the constitutional convention of 1814 that the quasi independent Norway's founding fathers delivered an admonition to their countrymen similar to the one George Washington had delivered in his Farewell Address eighteen years earlier in 1796. The country

was warned against a continuation of links, like those with Denmark, which had proved to be "an unnatural liaison with another country which could only involve us in unnatural wars and entangle us in disputes with Powers which it was neither natural nor necessary for Norway to quarrel with. By avoiding such links with other Powers, Norway could keep out of European quarrels."<sup>3</sup> No doubt these feelings were conceived as far back as the 1600s when Denmark drew Norway into wars with Sweden and the Baltic Sea powers. During the Napoleonic Wars Denmark again drew Norway into war, on Napoleon's side, against Britain. The resulting British blockade and the British market being closed to Norwegian timber caused the worst economic depression Norway had ever experienced. This was one of the first lessons which helped to formulate future Norwegian policies of maintaining friendly relations with Britain. A similar philosophy was used in the development of the three cornerstones of Norwegian national security policy which were first articulated during the constitutional convention: "first, the security of its geographical situation on Europe's periphery; second, the security of automatic protection by Britain and British sea power; third, a determination not to jeopardize this fortunate position through ventures into foreign policy."<sup>4</sup> Although Norway had established its own

---

<sup>3</sup>Olav Riste, "*The Historical Determinants of Norwegian Foreign Policy.*" in Johan Jorgen Holst, ed., Norwegian Foreign Policy in the 1980s (Oslo: Norwegian University Press, 1985), p.12.

<sup>4</sup>Ibid.,p. 13.

identity, it did not have the people, resources, or political power to assert its independence by its own means. It was not until the later part of the nineteenth century that Norway was able to gain more control of its internal matters and separate from its union with Sweden in 1905.<sup>5</sup> The initial lack of foreign policy experience, domestic concerns, and rapid industrialization contributed to an isolationist and neutral foreign policy orientation.

## **B. 1905-WORLD WAR I**

During the period from 1905 to World War I, Norway's economy prospered. Its policies emphasized its economic interests in foreign trade, fishing, and shipping. Additionally, Norway followed the advice of another American president, Thomas Jefferson. "Peace, commerce and honest friendship with all nations - entangling alliances with none."<sup>6</sup> With this idea in mind the Norwegians enjoyed economic progress while not becoming entangled in the swamp of international politics.

The Russian presence on the Eastern border was the only source of apprehension in this period. This threat was considered minimal since the Russian military had been weakened after being defeated by Japan in 1905. The Norwegians, however, assumed that Britain, which during the nineteenth

---

<sup>5</sup>James G. Terry, Factors Affecting the Military Environment of North Norway: Its History, International Relations, Physical Characteristics, and Balance of Military Forces (Santa Monica, CA: Rand Corporation, 1988), p. 3.

<sup>6</sup>Riste, p. 14.

century had feared the extension of Tsarist Russia over Norwegian territory, would never let Russia conquer Norway. With this theory in mind the Norwegian elites believed that in the event of hostilities, they could count on Britain as an ally. Armed with these two theories, geographical remoteness and security provided by Britain's self-interest in preventing Russia from gaining a foothold in Norway, foreign entanglements were regarded as unnecessary and dangerous.<sup>7</sup>

One of the first foreign policy initiatives by the Norwegians was the 1907 Treaty of Integrity with four of the great powers of Europe: France, Germany, Britain, and Russia. This was a guarantee that Norway would not cede itself or any part of its territory to any power. The treaty was also designed to garner international guarantees for Norway's neutrality. The Norwegian population favored the isolationist idea when it came to foreign policies. But Norway's style of isolationism, in fact, did not mean isolation since Norway's economy depended heavily on foreign trade and the earnings of its merchant navy.<sup>8</sup>

The policy of neutrality was first tested during the First World War when Norway, Sweden and Denmark invoked common security policies. However, two factors, the impending German defeat and the Norwegian dependence on a British-dominated sea, led Norway to adopt a more pro-British attitude and to

---

<sup>7</sup>Olav Riste, "*The Historical Determinants of Norwegian Foreign Policy*," in Johan Jorgen Holst, ed., Norwegian Foreign Policy in the 1980s (Oslo: Norwegian University Press, 1985), p. 13.

<sup>8</sup>Ibid.

become what was referred to as a "neutral ally."<sup>9</sup> The war in Europe never threatened the integrity of Norwegian territory. However, German U-boat actions during the war inflicted heavy damage on Norwegian merchant shipping. As a maritime nation, Norway, was dependent on its shipping and trade to sustain its economy. The allied blockades and the German submarine warfare placed Norway in a fragile position of trying to maintain its neutral status. Britain controlled many of the supplies on which the Norwegian economy depended, and the American embargo of goods on European neutrals placed strains on Norway's trade. After negotiations with the United States and Britain, Norwegian exports of vital supplies were integrated into the allied efforts. Since Norway never was directly involved in the war or any political conflicts during this period, Norwegians continued to believe that military means were not needed in the conduct of Norwegian security policies and that the country's geographical remoteness from Central Europe would guarantee its peace. Norway emerged from World War I with its territory intact but its policy of strict neutrality weakened with its involvement in allied shipping.

### **C. INTER-WAR PERIOD AND WORLD WAR II**

During the inter war period Norway maintained its policy of neutrality. Nevertheless, Norway did become a member of the League of Nations and by

---

<sup>9</sup>Arne Olav Brundtland, *Norwegian Security Policy: Defense and Nonprovocation in a Changing Context*, in Gregory Flynn, ed., NATO's Northern Allies: The National Security Policies of Belgium, Denmark, The Netherlands & Norway (Totowa, NJ: Rowan & Allanheld, 1985), p. 172.

virtue of this subscribed to the policy of collective security.<sup>10</sup> There were mixed feelings amongst the Norwegian people over joining the League of Nations, especially from the proponents of neutrality, but, most were in favor. Membership in the League departed from the long standing Norwegian desire not to become entangled in organizations which could draw Norway into conflicts. In the League of Nations, no member could adopt a neutral position when it came to the issue of infringements of world peace. Norway's government, in keeping with its neutralist principles, nonetheless reserved the right to refrain from participating in military sanctions. Aside from this issue, Norway and the other Nordic states were active participants in the League's peacekeeping and humanitarian measures. Norway used its position as a small state to represent the moral and normative position on international issues.<sup>11</sup> The Norwegians were, and still are, active players in promoting international arbitration agreements and negotiating peaceful settlements to conflicts.

When tensions began to rise on the European continent after Hitler seized power in Germany, membership in the League showed signs of a ticket to becoming involved the developing European conflict. When this occurred, Norway sought release from its obligations toward collective action under article

---

<sup>10</sup>Riste, p. 15.

<sup>11</sup>Baard Bredrup Knudson, *Norway: Security Dilemmas and Current Issues*, in Catherine M Kelleher and Gale A Mattox, eds., Evolving European Defense Policies (D.C. Heath and Company/Lexington, MA/Toronto: Lexington Books, 1987), p. 297.

16 of the League of Nations Covenant<sup>12</sup> and shifted back to the position it took in World War I under the protective cover of the British Royal Navy. In this position Norway felt it would be protected from German aggression. The Norwegians gambled on Britain's interest in preventing Germany from acquiring bases in Norway and assumed that Britain would not need to use Norwegian territory.<sup>13</sup> Armed with this belief, its recently proclaimed disapproval of League obligations, its traditional neutrality, and the assumption of British naval supremacy in the North and Norwegian Seas, Norway in 1933 actually reduced the armed forces to a mere neutrality guard.<sup>14</sup> Norway failed to appreciate the developments in military technology being acquired by the major European powers and the rising power of Hitler in Germany. Norway did not recognize the increasing importance of its territory along the sea for basing airpower for naval protection.<sup>15</sup> Collective defense agreements between the Scandinavian countries were considered during this time, but, the disparities in their security concerns hindered cooperation. Finland feared the Soviet Union, Denmark feared Germany, and Sweden was undecided. Norway, on the other hand, did

---

<sup>12</sup>Brundtland, p. 172.

<sup>13</sup>Ibid.

<sup>14</sup>Rene Nyberg and Krister Wahlback, *Security and Neutrality in the North of Europe and Changing East-West Relations*, in Ciro Elliot Zoppo, ed., Nordic Security at the turn of the Twenty-first Century (Westport: Greenwood Press, 1992), p. 58.

<sup>15</sup>Brundtland, p. 173.



not fear anyone and continued to rely on its geographical remoteness as a key to its neutrality.<sup>16</sup> It took the imminent threat of war in the late 1930's to push defense issues to the forefront. But, it was not until early 1940 that the Norwegian Parliament approved increases in defense. By then it was too late.

The Germans began planning an invasion of Norway in late 1939. Germany saw the need to establish strategic naval and air bases in Norway for several reasons. First, Germany did not want its fleet to become bottled up in the Baltic Sea as it had been in World War I. Second, Germany depended heavily on the iron ore mined in Sweden. This material was transported by rail from Sweden to Northern Norway, whence it was shipped to Germany.<sup>17</sup> Finally, by occupying Norway and establishing strategic bases along the Western coast, Germany could prevent British control of the Norwegian area. This was seen as necessary because of an increased talk of Allied intervention in the Russo-Finnish War and the acceptance of a British proposal in January 1940 by Norway and Sweden to allow British naval forces to operate inside Norwegian territorial waters.<sup>18</sup> In establishing bases in Norway, the German Armed Forces High Command felt it would be in a better position to conduct their "siege of Britain" by sea and air.

---

<sup>16</sup>Ibid., p. 172.

<sup>17</sup>Terry, p. 6.

<sup>18</sup>Earl F. Ziemke, *The German Decision to Invade Norway and Denmark*, in Kent Roberts Greenfield, ed., Command Decisions (Washington DC: U.S. Army, Center of Military History, 1987), p. 57.

"The single most important foreign-policy event for Norway was the German military attack on April 9, 1940. It shattered the Norwegian belief in pursuing national security based on strict neutrality and left a lasting imprint on her security policy."<sup>19</sup> The invasion focused the attention of the defense and foreign policy elites on the fact that the defensive measures of a country cannot fluctuate with the presence of perceived threats but must be continually evolving over time. "The Norwegian experience of April 1940, in sum, provided a classic example of Henry Kissinger's assertion about what happens when a neutral state makes its defense dependent on the assistance of other countries: The result is a combination of the disadvantages of both neutrality and alliance. Concern about its non-alignment prevents such a state from making joint defensive preparations with a would-be protector, while at the same time the expectation of assistance reduces the requirement for national defense preparedness."<sup>20</sup> The Norwegians felt that their neutrality would remain intact and that their proclamation of neutrality at the outbreak of hostilities in 1939 would prevent them from being drawn into the conflict. Therefore, "plans for defense measures assumed only that Norway's neutrality could be randomly violated, and not deliberately breached or attacked. When the war broke out,

---

<sup>19</sup>Brundtland, p. 173.

<sup>20</sup>Riste, p 16.

naval and coastal artillery mobilization had to take place in steps because of a shortage of trained personnel and the poor state of the equipment."<sup>21</sup>

Although the allies provided forces for the defense of Norway, it was too little and too late. Britain and France launched a counter invasion a week after Germany had invaded. Hasty planning, poor support, especially the lack of air power, vitiated the effort against the German forces. After the German invasion, the king and his government fled Norway and established a government in exile in England during the war. It was here that the king and his cabinet began to reassess Norway's foreign policy. The mainstays of Norway's strategic thinking, neutrality and isolationism, were moot. However, the German invasion had established three facts. "First, Norwegian territory proved too important to major European powers for them to refrain from attempting to occupy it. Second, Norwegian forces proved insufficient to deter or repel such an attempt. Finally, those states naturally allied to Norway acted too late to deter the attack, had insufficient strength to repel it, and withdrew too early to prevent occupation."<sup>22</sup>

Despite the fact that the Germans invaded in April 1940, "the traditional doctrine of neutrality remained the dominant theoretical element in official foreign policy thinking until November of that year."<sup>23</sup> At this time, there was a

---

<sup>21</sup>Tonne Huitfeldt, *Force Mobilization in Norway*, in Jeffrey Simon, ed., NATO-WARSAW Pact Force Mobilization (Washington, DC: The National Defense University Press, 1988), p. 523.

<sup>22</sup>Brundtland, p. 172.

<sup>23</sup>*Ibid.*

changing of the guard within the government in exile. Trygve Lie replaced Halvdan Koht as Foreign Minister. Koht was of the old guard whose experiences were influenced by the Norwegian national struggles at the turn of the century. Koht advocated a policy of unconditional neutrality to avoid involvement. Lie, on the other hand, had developed his ideologies during the inter-war period.<sup>24</sup> He favored a policy which came to be referred to as the "Atlantic Policy," a collaboration in a tightly knit security system which would unite the countries bordering the North Atlantic.<sup>25</sup>

The government also realized the future need for an alliance in order to provide Norway security. At this point Norway had to decide where to seek an alliance. Traditionally, Norway viewed itself as an Atlantic country, based on its long seafaring traditions. This led Norway to view a North Atlantic Alliance with Northwestern Europe and the United States as an option. The Norwegians viewed this as feasible since, ideologically, they felt the political traditions and culture of the "Atlantic peoples" more resembled theirs than the traditions of the peoples of Central Europe. This was based on the comparison of the personal liberties and constitutions of Norway and the English-speaking democracies whereas German culture was viewed as one of the sources of Nazism and

---

<sup>24</sup>Nils Morten Udgaard, Great Power Politics and Norwegian Foreign Policy (Oslo: Universitetsforlaget, 1973), p. 24.

<sup>25</sup>Ibid., p. 25.

Fascism.<sup>26</sup> In May 1942, the Norwegian Cabinet published a paper entitled "Main Principles of Norwegian Foreign Policy" which laid out its beliefs in the closest possible cooperation - military, economic, and political- among the nations bordering the North Atlantic. This plan was formulated to prevent another occurrence of German aggression in the post-war period.<sup>27</sup>

While the government in exile was working towards a new foreign policy, the members of the Home Front, the resistance movement in Norway, were developing their own foreign policy attitudes. The views of the two groups contrasted on many points.<sup>28</sup> The foreign policy attitudes of the resistance leaders were closer to the traditional Norwegian attitudes, non-alignment and neutrality, than to those of the government in London. The resistance leaders expressed a general distrust of Great Powers while emphasizing the importance of the Nordic countries and they did not view security solely in an Atlantic context. They also stressed the need to accommodate the Soviet Union in future security policy decisions and did not want any post-war commitments made during the war.<sup>29</sup>

The liberation of Norway prompted many concerns over Norway's position with the allied powers and the USSR. Soviet troops were the first to enter

---

<sup>26</sup>Ibid., p. 27.

<sup>27</sup>Riste, p. 17; see also Udgaard, p. 26.

<sup>28</sup>Udgaard, p. 30.

<sup>29</sup>Ibid., p. 32.

Norwegian territory in the liberation of Norway. The Norwegian government's primary concern was with protecting its interests and sovereignty over a region that might be of interest to the USSR. It was imperative to prevent a Soviet occupation of Norway. The government in London pushed to get the Western allied powers and the USSR at the negotiating table to plan the liberation process. The Supreme Headquarters Allied Expeditionary Force (SHAEF), however, no longer felt that northern Norway was of military significance compared to the battles on the European continent. SHAEF also wanted to avoid becoming involved in any type of operation that might cause friction between the Western allies and the USSR. Hence, the Western powers and the USSR effectively fought two independent wars against Germany<sup>30</sup> with relatively little joint planning and operational coordination.

The Soviet advance in pursuit of the Germans ended 65 miles into Norwegian Finnmark to Kirkenes. It was there that Stalin halted his forces and declared that he did not consider the liberation of Norway a Soviet task. Soviet forces, Stalin said, would turn to helping the peoples of Poland, Yugoslavia and Czechoslovakia.<sup>31</sup> Other possible explanations for the Soviet halt can be debated. Stalin may have judged that Norway fell within the Western sphere of influence.<sup>32</sup> On the other hand, by shifting to war efforts in Eastern Europe,

---

<sup>30</sup>Udgaard, p. 63.

<sup>31</sup>Ibid., p. 65.

<sup>32</sup>Ibid., p.66.

Stalin may have felt that he would be in a better position to claim it as a Soviet sphere of influence.

The lack of information flowing from the USSR on its plans during the war caused great anxiety for the Norwegians. A lack of communications between SHAEF and the USSR placed Norway between the two powers, because SHAEF did not want to antagonize or cause friction with the Soviets in the final crucial stages of the war.<sup>33</sup> Norway's realization that it needed to be tied to an alliance that obligated others to provide assistance came during the German retreat. The Germans began laying waste to the Norwegian terrain. The Norwegians regarded this as a foreign policy, domestic policy and humanitarian issue. The allied powers, however, did not want to become involved in this issue for fear that they might antagonize the Soviets who were in the northern region. When appeals by Norway to the United States and Britain failed to gain the desired results, the Norwegians knew that if they were going to be guaranteed assistance it would have to be through a binding alliance. Norwegian Foreign Minister Lie knew that in the future the USSR would be an important factor for Norway and stated, "a good relationship with the Soviet Union will be one of the cornerstones of our foreign policy in the future."<sup>34</sup>

---

<sup>33</sup>Ibid., p. 83.

<sup>34</sup>Ibid., p. 94.

The immediate post-war period, 1945-1947, was a period of reconstruction for Norway. The belief that the Western powers would provide adequate security allowed Norway to concentrate on economic development while moving more slowly on military development. Towards the end of the war, concerns about the Soviet Union and its demands with regard to the Svalbard Archipelago overshadowed plans for an Atlantic policy. The establishment of a new world order through the United Nations was taking priority. With Trygve Lie becoming the first Secretary General of the United Nations, Norwegians felt that the UN would also be a sufficient guarantee of security during Norway's reconstruction. Norwegians believed that they could use the United Nations as a platform for bridgebuilding to foster cooperation between the Great Powers. Halvard Lange, who succeeded Lie as Norway's Foreign Minister, saw Norway's task as working to remove discontent and suspicion between the Great Powers.<sup>35</sup> It was believed that the United Nations could only be successful if the Great Powers cooperated. As long as the Great Powers could cooperate in the Security Council, Norway could concentrate on other matters.<sup>36</sup> Foreign policy in this period concentrated on non-alignment, which somewhat resembled the pre-war philosophy. The major point of this policy was to avoid anything that might

---

<sup>35</sup>Einar Lochen, Norway in European and Atlantic Co-operation (Oslo: Universitetsforlaget, 1964), p. 12.

<sup>36</sup>Brundtland, *Norwegian Security Policy: Defense and Nonprovocation in a Changing Context*, p. 173.



hinder the execution of the reconstruction strategy.<sup>37</sup> One foreign policy area that Norway did enter was bridgebuilding between East and West. The policy of bridgebuilding had two primary objectives: 1) making collective security work by facilitating Great Power cooperation and, 2) to keep Northern Europe free from Great Power tension and rivalries. Although no "bridges" were actually built between the East and West, Norway pursued certain activities and refrained from others so as not to antagonize the Soviet Union. Additionally, Norway wanted to demonstrate that it was not allying with one power against another and thus not giving one a strategic advantage. Norwegian policy makers believed that by acting independently within the United Nations it might prevent the world from dividing into two power blocs.<sup>38</sup>

An attempt to establish a Nordic cooperation framework subordinated to wider cooperation in the United Nations was considered in 1945. During the war the government in exile had expressed this idea and the Home Front Leaders strongly endorsed it as well. Differences in foreign policy ideas prevented actual security and defense cooperation from developing. Sweden favored a neutrality league while Norway and Finland preferred to develop relations with the East and West and to serve as a bridge to further harmony between the two sides.<sup>39</sup> The reluctance of Norwegian leaders to subject themselves to joint

---

<sup>37</sup>Udgaard p.107 & 109; see also Brundtland p.173.

<sup>38</sup>Udgaard, p.149.

<sup>39</sup>Ibid., p.150.

decision making with the Swedes and Danes in foreign policy also limited Nordic cooperation. In the early post-war years, Norway had gained a certain prominence and prestige in the world and in the United Nations and preferred to conduct its foreign policy within the framework of the United Nations.

The Norwegians exhibited strong independence in their diplomacy during the early post-war years. These early years after the war saw Norway engage in close cooperation with the Western Powers in the military and economic fields, but Norway refrained from such an open policy in diplomatic areas. Political and diplomatic support were frequently denied to Britain and the United States in disagreements with the Soviet Union. A strict policy of East-West bridgebuilding was maintained. At the Paris peace conference and at the United Nations in 1946, Norway emphasized its policies of non-alignment and bridgebuilding. The possibility of Norway joining a Western alliance for security was excluded in the immediate post-war years. The government had first rejected this prospect in December of 1945. Trygve Lie pointed out to the Storting that Norway was no longer on the periphery and would occupy an exposed strategic position in the future. Lie argued that a policy of alliances and "blocs" would decrease rather than increase Norway's security.<sup>40</sup> The Soviet projection of power in the east in the liberation of northern Norway proved to Norwegian policy makers that they were in the proximity of a great power. Foreign policy makers attempted to steer

---

<sup>40</sup>Ibid., p.171.

clear of the political disputes developing between the Soviet Union and the Western Powers over spheres of influence. This and other experiences in World War II taught Norway that it was strategically vulnerable in any clash between major powers in Europe. The growing significance of the Arctic and being in the "line of fire" between the United States and the Soviet Union led Norway's Chief of Defense, General Ole Berg, to believe that a pre-emptive attack might be made on Norway in the initial phase of a larger war.<sup>41</sup> Defense preparations were thus based on the period of time it was believed that Norway would have to fight alone before assistance would arrive. A four month delay was the time determined.<sup>42</sup>

In 1947 there began another re-assessment of Norway's foreign policy when the country decided to participate in the US-sponsored Marshall Plan. Even though the Norwegians needed the economic assistance, their government was still reluctant to take a clear pro-Western stance on an issue that would manifest the division of Europe.<sup>43</sup> After the Soviet Union and Czechoslovakia withdrew from the talks, it became an entirely Western measure.

During this same year, the issue of the Svalbard Archipelago re-emerged. Interest in the Arctic region was increasing and in the new "air age" the two

---

<sup>41</sup>Ibid., p. 164.

<sup>42</sup>Ibid.

<sup>43</sup>Riste, p.19.

superpowers faced each other across the Arctic.<sup>44</sup> The Soviet Union was pressuring Norway to review the 1920 Svalbard Treaty which had given sovereignty of the archipelago to Norway.<sup>45</sup> Talks which had been initiated before the end of the war, when the Soviets claimed the treaties were invalid because they were concluded before the Soviet Union had become an important world power, had been suspended.<sup>46</sup>

As East-West tensions mounted, the Soviets began to portray the co-operation between the Scandinavian countries as a device of Western influence in the north.<sup>47</sup> Other events in 1947 and 1948 also influenced Norwegian foreign policy. The Communist coup in Czechoslovakia had made a strong impression on public opinion as did the growing East-West conflict in Berlin. In 1948 the Swedes initiated talks on the establishment of a Scandinavian Defense Union. The idea of Nordic cooperation provoked suspicion and complaints from the Soviet Union. The security requirements of Norway and Sweden were not similar enough to establish a pact. The experiences of each country during World War II resulted in each looking to different solutions. Sweden's success with neutrality during the war, different geographical position, and larger defense

---

<sup>44</sup>Udgaard, p.196.

<sup>45</sup>Ibid., p. 196-202; see also John Lund, *Don't Rock the Boat: Reinforcing Norway in Crisis and War* (Santa Monica: RAND Corporation, P-7374-RGS, 1988), p.12.

<sup>46</sup>Riste, p.18; see also Terry, p.15.

<sup>47</sup>Udgaard, p.204.

forces enabled it to continue its policy of strict neutrality. Norway, on the other hand, was still haunted by the Nazi invasion of 1940 and knew that its requirements for security would go beyond the capabilities which could be provided by a Scandinavian Defense Union. At the time Sweden, which had heavily armed itself during the war, was one of the strongest military powers in Europe. This, however, did not convince the Norwegian government that a Scandinavian Defense Union would be powerful enough to thwart Soviet aggression.<sup>48</sup> The Norwegians, who had been seeking military aid from the United States and Britain, wanted an Atlantic connection in their defense efforts. When it was learned by the Norwegians that priority for arms sales by the United States would be given to its allies, Norway rejected the idea of the Scandinavian Defense Union. With the collapse of the Scandinavian defense negotiations, the door was opened for Norway to join the Atlantic alliance.

#### **D. COLD WAR**

"At the beginning of the Cold War, Norway had three security options: first, it could continue its neutrality while strengthening national defense; second, it could turn to an international-security arrangement on a regional basis in Scandinavia; or third it could join the countries that were in the process of forming the Western Alliance."<sup>49</sup> The option of neutrality had already been

---

<sup>48</sup>Lund, p. 12.

<sup>49</sup>Brundtland, *Norwegian Security Policy: Defense and Nonprovocation in a Changing Context*, p. 175.

proven ineffective by the events of World War II and the possibility of a Scandinavian Defense Union pact had already been explored and found wanting.

Norwegian desires to join the Atlantic Alliance were based on the possibility of gaining protection under a security system based on deterrence provided by the Western powers. The Norwegians also hoped to obtain arms and military equipment in ways that would not interfere with civilian reconstruction.<sup>50</sup> Norway entered into the NATO alliance as one of its founding members in April 1949. The Storting had voted on March 29, 1949, 130 votes against 13, for joining NATO.<sup>51</sup> A majority of the population, 54 percent, felt that joining the alliance would increase Norway's security.<sup>52</sup> Membership in the NATO alliance has served as a deterrent to attacks on Norwegian territory. To stress the defensive nature of its alliance membership, Norway imposed a series of restraints and restrictions on its membership which can be seen as a legacy of Norway's neutralist attitude.<sup>53</sup> These self-imposed restrictions, most notably the non-basing policy, which prevented foreign troops from being permanently stationed in Norway, were in fact confidence-building measures designed to

---

<sup>50</sup>Ibid., p. 177.

<sup>51</sup>Lochen, p. 13.

<sup>52</sup>Johan Jorgen Holst, *Norwegian Security Policy: Options and Constraints*, in Johan Jorgen Holst, ed., Five Roads to Nordic Security (Oslo: Universitetsforlaget, 1973), p. 79.

<sup>53</sup>Ibid.

show the Soviet Union Norway's desire to maintain stability and a low level of tension in the northern region. The basing policy was a compromise between the Labor government and the Atlanticists. The former sought to maintain the traditional neutralist policy while the latter favored NATO membership.<sup>54</sup>

Norwegian participation in NATO is characterized by a security policy approach comprised of deterrence and reassurance.<sup>55</sup> Deterrence is based on Norway's own national defense efforts and the reinforcements of NATO. Reassurance is based on Norway's unilateral confidence-building measures. The non-basing policy, the prohibition of nuclear weapons on Norwegian soil and restrictions on NATO exercises in Norway, were aimed at presenting a nonprovocative security strategy. These restrictions were the basis for Norwegian foreign policies throughout the Cold War. The nonbasing policy was in a sense a signal of restraint and a message of reassurance to the Soviet Union: Norway would not allow the permanent basing of foreign troops on its soil unless attacked or exposed to the threat of attack. The assessment of threat would be made by Norwegian officials, and they maintain the right to revoke or change these unilateral policies if they feel threatened. The self-imposed

---

<sup>54</sup>Lund, p. 14; see also Brundtland, p. 179.

<sup>55</sup>Richard A. Bitzinger, *The Politics of Defense in NATO's Northern Flank: Denmark, Norway and Iceland*, in Ciro Elliot Zoppo, ed., Nordic Security at the turn of the Twenty-first Century ( Westport: Greenwood Press, 1992), p. 152.

restraints that characterize the confidence-building measures in Norwegian security policy contributed to the stability and low level of tension in the region.

The status quo that developed in the Nordic region during the Cold War was referred to as the Nordic Balance. The situation that produced the Nordic balance came from the complex security patterns the Nordic countries developed. The stability that was created in the region was maintained through the realization that changes in the security policies of one Nordic country might well prompt changes by the others.

During the early part of the Cold War, Norway maintained a consistent foreign and security policy. Rearmament was taking place with assistance from the United States, and Norway was developing its ability to receive allied reinforcements in the event of a war. An issue which raised protests from the Soviet Union was the admittance of German liaison officers to AFNORTH<sup>56</sup>, NATO's regional command for the Northern Region.<sup>57</sup> The Soviet Union was protesting Norway's growing integration in NATO and the presence of German liaison officers on AFNORTH's staff in 1958 only exacerbated the situation. Soviet officials saw this as an insult to those that had fought against the Germans. Additionally, in 1958, the Soviets accused the Norwegians of violating the bases policy with the prepositioning of emergency supplies for German naval

---

<sup>56</sup>Allied Forces Northern Europe

<sup>57</sup>Lund, p. 14.



ships in the south of Norway. Oslo, however, reserved the right to interpret the bases policy. Since there were no foreign "bases" being established during peacetime, the protests were rejected.<sup>58</sup>

The 1960s presented several incidents which tested the Norwegian ability to maintain the status quo in the region. The U-2 incident was the first issue which prompted complaints from the Soviets. The Soviets had been accusing the Norwegians of building airbases in northern Norway for American bombers. The accusations were repeatedly denied by the Norwegians. In May 1960, the shoot down of an American U-2 spy plane over the Soviet Union and later discoveries by the Soviets that the pilot had instructions to land at Bodo, in northern Norway, led to serious accusations towards the Norwegians. The Norwegians denied claims that they had authorized the use of their bases for these flights.<sup>59</sup>

The second incident occurred two months later. An American RB-47 reconnaissance plane was shot down over the Kola Peninsula. The Americans claimed the aircraft was over international waters. Again the Soviets used this to accuse the Norwegians of allowing their territory to be used by the United States for aggressive actions against the Soviet Union. Soviet claims were again

---

<sup>58</sup>Ibid., p. 15.

<sup>59</sup>Lund, p. 15.

rejected. However, the Norwegians began a closer review of American and allied activities around Norway in a effort to prevent being put in a similar position.<sup>60</sup>

Criticisms and attacks from the Soviet Union concerning Norwegian security policies in the wake of these incidents prompted the Norwegians to revert to using the basing policy as a lever of influence. Complaints by the Soviets were dropped, however, when Norwegian Foreign Minister Lang issued a message to the Soviets that NATO was an integral part of Norwegian security policy and continued pressures in regards to this would result in a reexamination of the basing policy. Lang also issued a statement to the United States declaring that it should respect Norway's right to "preserve and expand good neighborly relations with the Soviet Union."<sup>61</sup>

The "note crisis" of 1961 highlighted the Nordic Balance concept and the role of nonbasing policy as an instrument of Norwegian policy.<sup>62</sup> The principle of the Nordic Balance was to maintain the status quo in the Northern region. Finland based its security on neutrality and its friendship treaty with the Soviet Union. Finland's policy was a precondition to Norway and Denmark's nonbasing policies and alignment with NATO.<sup>63</sup> Each side is held in check in order to preserve the balance. In October 1961, tensions were heightened when the

---

<sup>60</sup>Ibid., p. 16.

<sup>61</sup>Lund, p. 16; see also Brundtland, p. 190.

<sup>62</sup>Brundtland, p. 190.

<sup>63</sup>Ibid.

Soviet Union sent a diplomatic note to Finland requesting consultations under Article II of their Treaty of Friendship, Cooperation, and Mutual Assistance. The Soviets claimed there was a conspiracy to reestablish German domination in Northern Europe because of a growing West German influence in Denmark and Norway.<sup>64</sup> The Soviets assessed that this was a threat to Soviet-Finnish security, and the Soviets warned that countermeasures could be taken against Finland. The response by the Norwegians was quite clear: if the Soviets undermined Finnish neutrality, this would force Norway deeper into NATO and result in a reversal of its nonbasing policy and ban on storing nuclear weapons.<sup>65</sup> The incident passed quietly but proved the relevance of the Nordic Balance and Norway's ability to use its basing policy as a foreign policy instrument.

In the 1970s and early 1980s a greater emphasis was placed on the nonprovocative aspect of Norwegian NATO security policy. Political leaders in Norway that had experienced German occupation during World War II were being replaced by younger leaders who were less enthusiastic about the United States and NATO. The rise of the extreme left in politics disrupted the consensus on security matters that had been built.<sup>66</sup> The massive military

---

<sup>64</sup>Arne Brundtland, *The Context of Security in Northern Europe*, in Paul M. Cole and Douglas M. Hart, eds., Northern Europe: Security Issues for the 1990's (Boulder and London: Westview Press and CSIS, Georgetown University, 1986), p. 17; see also Lund, p. 17.

<sup>65</sup>Brundtland, p. 17; see also Lund, p. 18.

<sup>66</sup>Lund, p. 19; see also Bitzinger, p. 160.

buildup in the Kola Peninsula region by the Soviet Union added to the tension since it directly affected the security of Norway and resulted in greater reliance on commitments from allied and NATO forces.

The prepositioning of equipment for the Fourth U.S. Marine Amphibious Brigade (MAB) in the late 1970s was seen by some Norwegian officials as a violation of its non-basing policy and provocative towards the Soviets.<sup>67</sup> The Norwegians were in a period where they were reassessing the reassurance-deterrence strategy and inclined to favor a more nonprovocative image. Initially the proposal called for the prepositioned equipment to be placed in northern Norway, as desired by the United States and Norwegian military authorities. The supplies, however, were finally located in central Norway where they would present a lower profile and more defensive posture. This change in location was in response to Soviet protests about "violations" in the basing policy. The debate among Norwegian party officials had centered on the confidence in American political judgement and objectives. The outcome of the debate satisfied the major participants.<sup>68</sup> Additionally, the Norwegian government insisted that the air element of the MABs exclude the long-range A-6 Intruders which are capable of carrying nuclear weapons.<sup>69</sup> It had been the expansion of

---

<sup>67</sup>Bitzinger, p.161.

<sup>68</sup>Lund, p.21.

<sup>69</sup>Lund, p.21; see also Johan Jorgen Holst, *The Security Pattern in Northern Europe: A Norwegian View*, in Geoffrey Till, ed., Britain and NATO's Northern Flank (Houndmills, Basingstoke, Hampshire, and London: The

the Soviet military installations on the Kola Peninsula that had prompted this prepositioning of equipment. The Norwegian government initiated the prepositioning plan as a response to this perceived change in the military balance in the region, and it made adjustments to the plan to maintain the low level of tension.

The Soviet buildup in the Kola peninsula and the United States Forward Maritime Strategy<sup>70</sup> is another example of the Norwegian government's efforts to maintain a low tension level. Norwegian concerns over growing Soviet naval activity in the Norwegian Sea prompted Norwegian requests for an increase in U.S. naval presence in the region. This was deemed necessary since a former head of the Norwegian Military Intelligence Service, Admiral Jan Ingebrigtsen, pointed out that the Soviet Union had replaced the British Navy as the dominant naval force in the region.<sup>71</sup> However, an increase of U.S. naval activity in the northern region was perceived as a threat to the Soviet Union, according to Mikhail Gorbachev. He blamed NATO and especially the United States for the militarization in the North.<sup>72</sup> The result was a call by many Norwegians,

---

Macmillan Press Ltd., 1988), p. 41.

<sup>70</sup>Rodney Kennedy-Minott, U.S. Regional Force Application: The Maritime Strategy and Its Effect on Nordic Stability (Palo Alto, CA Hoover Institution, 1988), pp. 24-33.

<sup>71</sup>Ibid., p. 25.

<sup>72</sup>Burkhard Auffermann, *New Thinking in Soviet Foreign Policy and Nordic Security*, in Ciro Elliot Zoppo, ed., Nordic Security at the turn of the Twenty-first Century (Westport: Greenwood Press, 1992), p. 176.

including Defense Minister Johan Jorgen Holst, for initiatives that would prevent the "mediterraneanization" of the Norwegian Sea and a disruption of the sensitive situation in the north.<sup>73</sup>

## **E. POST-COLD WAR**

Now that the Cold War is over and the threat of Russian tanks rolling over the border into northern Norway has diminished, the challenges for Norway's security have also changed. "This clear and present danger associated with specific threat scenarios has been replaced by unspecified dangers."<sup>74</sup> Military issues are no longer the principal national security concern. Policy makers are now occupied with new political challenges in constructing a network of nonmilitary cooperative relations concerning the exploitation of resources, protecting the environment and managing economic activity in the Arctic.<sup>75</sup> Siri Bjerke noted in a speech in September 1995 that "the very concepts of security and security policy have seen significant changes over the last few years. The concept of extended security has gained broad acceptance. In addition to military security, this encompasses the relationship between

---

<sup>73</sup>Kennedy-Minott, p.26; see also Bitzinger, p. 161.

<sup>74</sup>Johan Jorgen Holst, *NATO and the Northern Region: Security and Arms Control*, in Paul J. Cook, ed., Change and Continuity in Europe's Northern Region (Washington DC: CSIS, vol. XIII, no. 4, 1991), p. 23.

<sup>75</sup>Ibid.

democracy, state and society, social stability, and environmental concerns."<sup>76</sup>

Population explosion, mass migration and desertification are a sampling of issues which fall into this category of extended security however, concentration here will be on the environment.

Environmental degradation is one of these "green" issues that in the past had taken a "backseat" to a Soviet/Russian military threat. With the help of environmental organizations like Bellona and Greenpeace, international attention to the environmental problem is gaining attention. Environmental degradation presents a threat to Norway's population and economic interests in the Northern region and in the Norwegian and Barents Seas. In 1993, Norwegian Foreign Minister Johan Holst issued a statement that said "Russian pollution was the biggest security problem Norway faces."<sup>77</sup> Years of dumping radioactive waste and nuclear reactors, scuttling nuclear submarines in these waters, sulfur dioxide emissions from nickel plants, and two high-risk nuclear power plants have created potential hazards to the fishing industry and to the health of people living in the northern region. Additionally, Robert Bathurst of the Peace Research Institute in Oslo points to another potential environmental problem. The increasing morale decline and chaos in the Russian armed forces

---

<sup>76</sup>Siri Bjerke, Norwegian State Secretary, in a speech on "The Environment and Security in the North Atlantic Region," at Reykjavik, 7 September 1995.

<sup>77</sup>"Radioactive Waste," *BNA International Environment Daily*, August 17, 1993.

has added to the threat of potential nuclear accidents. Nuclear submarines are stored all over the Kola Peninsula and as a result of this morale decline, people do not care about important safety checks and technical standards fall when spare parts and maintenance fail to materialize.<sup>78</sup>

The Norwegians have emphasized the need to establish working relationships between themselves, Russia and the West in order to solve the problems of cross-border pollution without conflicts. Action has been initiated for cooperation in the Barents Region as laid down in the Kirkenes Declaration on January 11, 1993.<sup>79</sup> The Barents Euro-Arctic council concentrates on seven areas of cooperation: the environment, economic cooperation, science and technology, regional infrastructure, indigenous peoples, cultural relations and tourism.<sup>80</sup> The European Union and TACIS<sup>81</sup>, a program developed by the EU, are also becoming involved in the environmental situation in Russia.

The controversy about cleaning up the Arctic will be a continuing tension point between the governments affected. It comes down to responsibility, cost,

---

<sup>78</sup>Robert Bathurst, "Decaying Northern Fleet Threatens Norway," *Aftenposten Sondag*, November 20, 1994, p. 3.

<sup>79</sup>The Kirkenes Declaration was signed by the Nordic Countries, Russia, and the European Union. They form what is called the Barents Euro-Arctic Council. The United Kingdom, France, Germany, the Netherlands, Poland, the United States, Canada and Japan participate as observers.

<sup>80</sup>Johan Jorgen Holst, *The Barents Region: Institutions, Cooperation and Prospects*, in Olav Schram Stokke and Ola Tunander, eds., *The Barents Region: Cooperation in Arctic Europe* (London: SAGE Publications, PRIO, 1994), p.11.

<sup>81</sup>Technical Assistance to the Commonwealth of Independent States



credibility, and priorities. The Russian government's perceived reluctance to disclose all the information on the known pollution in the region prohibits an accurate assessment as to cleanup requirements and potential hazards to people and the environment. The Russian government has even accused a retired navy captain of high treason and charged him with espionage. Alexander Nikitin, who was working as an analyst for the Norwegian Environmental group Bellona, was accused of turning over secret information on the Russian nuclear fleet. Bellona representatives say Nikitin was only used to sort technical information. Bellona has been collecting information on the safety of Russian nuclear facilities, submarines, and storage facilities.<sup>82</sup> "Environmental groups have complained that efforts to expose laxity in Russian storage of nuclear material, especially in the military, are meeting with harassment from security agencies."<sup>83</sup> Instances like this will continue to cast a shadow of doubt over Russia's commitment to disclose pertinent information that is needed to assist in the clean up of the environment.

The neighboring Scandinavian countries, Germany, France, the European Union, and the United States have all pledged monetary and technical support for the operations which have been estimated to cost between 230 and 270

---

<sup>82</sup>David Hoffman, "Russia Says Ex-Officer Spied for Ecologists." International Herald Tribune, February 13, 1996, p.2.

<sup>83</sup>Ibid.

billion dollars.<sup>84</sup> A breakdown of international support will be given in the next chapter.

---

<sup>84</sup>"Nuclear Pollution: Radioactivity Reaches Alarming Proportions in Northern Russia." *Europe Environment*, February 21, 1995.

### III. ENVIRONMENTAL ISSUES

#### A. NON-MILITARY SECURITY ISSUES

During the Cold War, the major threat to the security of Norway was the presence of Soviet Northern Fleet and Soviet missiles on the Kola Peninsula. After the end of the Cold War, the Kola Peninsula Region and the Russian Northern Fleet posed a new threat to Norwegian security, the presence of a decaying nuclear submarine fleet, radioactive waste storage facilities and nickel processing plants in the Kola peninsula.

"After 74 years of Communist environmental pollution mismanagement, the former Soviet Union which once spanned a sixth of the globe has become an environmental cesspool that is threatening its neighbors in Europe and Asia."<sup>85</sup> The Soviet Union built its nuclear program and its industries, during these years under communism, with little or no regard for the damage it was inflicting on the environment.

Until a few years ago, environmental pollution was not at the forefront of many countries national security concerns. However, in recent years the Scandinavian countries have taken the lead in their concern for the environment as one of their security concerns. These concerns were nothing new to Norway but, after the fall of the Soviet Union, more people began to speak out and more

---

<sup>85</sup>Paul Hafeinz, "the New Soviet Threat: Pollution," *Fortune*, June 27, 1992, p.110.

information was made available to the public. This concern gained more credibility in 1991 when Andrei Zolotkov, an engineer from the Murmansk Shipping Company, provided details to the Norwegian government about the locations and dates of radioactive waste dumping in the Arctic by the Murmansk Shipping Company and the Russian Navy from 1961-1990. Although it had been previously known that the Russians were polluting the Arctic, a United States satellite detected radioactive emissions off the Lista fjord 70 miles from Norway in 1982, the extent of the contamination was unknown.<sup>86</sup> Official recognition of dumping in the Arctic, which had long been denied by the leadership of the former Soviet Union, came in March of 1993 with the release of a report by a special commission headed by Alexey V. Yablokov, environmental advisor to Russian Federation President Boris Yeltsin.<sup>87</sup>

International efforts have been made to prevent the pollution of the oceans but these efforts have either been ignored because of lack of enforcement or too little too late. Internationally, the 1972 London Dumping Convention (LDC) went into effect 30 August 1975 and covers all maritime areas except internal seas. The LDC outlawed the disposal of high-level radioactive wastes at sea and required that nations desiring to dispose of medium and low

---

<sup>86</sup>Ole Mathismoen, "Kola Nuclear Waste Storage Facility 'Leaking'," *Aftenposten*, February 11, 1995, p.4.

<sup>87</sup>R. Monastersky, "Hazard from Soviet nuclear dumps assessed," *Science News*, vol. 143, May 15, 1993, p. 310.

level radioactive wastes do so in ocean basins at depths greater than 12,000 feet. The LDC prohibits the dumping of high level wastes. Medium and low level wastes require special permits and notification of the Secretariat of the International Maritime Organization (IMO) and necessitates the presence of an observer. This Observer comes from an authorized international organization and looks for three main IAEA requirements when dumping: 1) location of dumping outside continental shelf zone and internal and land locked seas, 2) depths of at least 4,000 meters, and 3) disposal only in regions between 50 degrees North latitude and 50 degrees South latitude. Depths in the Barents and Kara Seas, where the Soviet Dumping had taken place, ranged from 200 feet to 1,000 feet.<sup>88</sup> Russia even enacted its own environmental standards in 1991 in an attempt to control the level of pollution not only from ocean dumping, but also from other facilities including nuclear weapons facilities and nickel smelters. Unfortunately, these limits were continually exceeded without thought and when fines were levied, the value of the ruble was so low that it was viewed as a joke. Alexei Yabalov, Chairman of the Government Commission on Questions Connected with the Sea-Dumping of Radioactive Waste, issued a press statement confirming the fact that low-level dumping of radioactive waste in the Arctic by the Russian Navy continues despite a supposed ban on such

---

<sup>88</sup>Patrick E. Tyler, "Soviet's Secret Nuclear Dumping Causes Worry for Arctic Waters," *The New York Times*, May 4, 1992, Sec. A, p. 1, col. 1.

acts.<sup>89</sup> Some scientists believe the Russian Navy continues its dumping practices since they, the navy, do not have the capability or processing facilities to dispose of the waste properly.

Norway fears the radioactive contamination, in addition to a health threat, as a potential threat to its economy. In 1992, Norway's Defense Minister was quoted in an interview as saying, "If the rumor gets around that Norwegian and Russian fish are contaminated with radioactivity, we aren't going to sell many fish." This would have a devastating effect on the fishing industry in Norway and likewise would be an economic problem for Russia as well. If the fisheries in the Arctic waters near Norway and Alaska become contaminated with radioactive waste, Russia, which depends on fish exports as a critical hard-currency earner, would add more problems to its already weak economy.<sup>90</sup> Some effects of the pollution that have come from mainland Russia has already been seen in Norway. After the Chernobyl accident in 1986, in the north of Finland, Sweden, and Norway, herds of reindeer had to be destroyed, as a result of radioactive fallout from Chernobyl, to prevent native Lapps from eating their radioactive flesh.<sup>91</sup> This same incident could occur if the radioactive contamination from

---

<sup>89</sup>Joshua Handler, "Russian Navy Nuclear Submarine Safety, Construction, Defense Conversion, Decommissioning, and Nuclear Waste Disposal Problems." Trip Report: Greenpeace Visit to Moscow and Russian Far East July-November 1992, February 15, 1993, p. 25.

<sup>90</sup>Tyler, Sec. A, p. 1, col. 1.

<sup>91</sup>Hofeinz, p.110.

ocean dumping were to enter the food chain through the fishing industry, which, between Norway and Russia are two of the world's largest. The emissions of sulfur dioxide from two nickel processing plants in Kirkenes, just a few kilometers from the Norwegian border, is three times the total emission from all of Norway.<sup>92</sup>

The effects of the pollution have also had dramatic effects on the people that live in the Kola Peninsula region. Lung cancer, lead poisoning and emphysema are epidemic among workers in the factories and mines. Women have the highest rates of spontaneous abortions anywhere and, malformed hearts and bone-marrow defects afflict more than 25 percent of all babies. Data gathered by the Murmansk Department of Health suggest that more than 40 percent of industrial workers suffer from respiratory disease, which is five times Russia's daily norm. Additionally, the average male life expectancy is 50 years, among the lowest in the developed world.<sup>93</sup>

## **B. ORIGINS OF POLLUTION**

Where has all this pollution come from? There are different sources of pollution in the Arctic region. Primarily, the radioactive pollution has come from the dumping practices and wastes generated by the Russian (former Soviet

---

<sup>92</sup>Gro Brundtland, Remarks by the Prime Minister of Norway before a luncheon meeting of the European Institute. 18 May 1994.

<sup>93</sup>Michael Spector, "One of the Most Polluted Places on Earth," *International Herald Tribune*, March 29, 1994.

Union) Northern Fleet, dumping by the civilian run Murmansk Shipping Company which operates nuclear powered icebreakers, the rivers and fjords emptying into the Arctic which have been contaminated by nuclear facilities, weapons factories, waste ponds, and accident sites in Siberia. Another source of pollution is the emission of sulfur dioxide which originates from the nickel processing plants on the Kola Peninsula.

Pollution in the region has been broken down into three categories, reactors, liquid waste, and solid waste. Information gathered and presented by Greenpeace and information presented by a 46 member Russian commission reveals that since 1965, 18 nuclear reactors were dumped into the Arctic Ocean on the eastern coast of Novaya Zemlya. Of these, 15 were from naval vessels and three were from the nuclear powered icebreaker Lenin which suffered a major nuclear accident around 1966.<sup>94</sup> Seven of the reactors still contained their fuel when dumped and, all but one of the reactors were dumped in shallow water of 50 meters or less.

#### **1. Kola Peninsula**

The Fleet Headquarters of the Russian Northern Fleet submitted a letter to the Yablokov Commission admitting that up to ten thousand cubic meters of liquid waste and two thousand cubic meters of solid waste are discharged into the Arctic Ocean annually. "Liquid waste was disposed of in five areas of the

---

<sup>94</sup>Handler, p. 19.



Barents Sea to the west and southwest of Novaya Zemlya. Some 164,717 cubic meters with a total inventory of 490,795 GBq<sup>95</sup> were dumped. Solid waste was disposed of at seven sites along the west edge of Novaya Zemlya. Some 11,090 containers weighing 3,738 tons with a total inventory of 2,272,060 GBq were dumped."<sup>96</sup>

The Kola Peninsula presents itself as one of the largest environmental hazards in the Arctic region. It is here that Russia maintains its powerful nuclear submarine fleet. The "Northern fleet operates more than 200 nuclear propulsion reactors in its ballistic missile and attack submarines, which are based along the fjords of the Kola Peninsula. Together with surface ships and naval air forces, they represent the largest concentration of former Soviet naval power."<sup>97</sup> Within this conglomeration of naval power, 71 nuclear submarines await dismantling. 16 of these submarines have already had their fuel removed while 55 still have fuel in their reactors. According to the START II agreement, 150 nuclear submarines (Russian) are to be dismantled. These submarines will come from both the Pacific and Atlantic fleets. All except 22 of these

---

<sup>95</sup>Becquerels, 1bq= $2.7 \times 10^{-11}$  cesium-137.

<sup>96</sup>Handler, p. 19.

<sup>97</sup>Tyler, Sec. A, p. 1, col. 1.

submarines have two reactors which gives a total of 278 nuclear reactors which will be removed need to be stored.<sup>98</sup>

One of the most severe nuclear risks in the region comes from the storage ship *Lepse* which contains a radiation danger of over half the radiation that was emitted from Chernobyl. The 83 meter long vessel tied up in Murmansk harbor only a short distance from apartment buildings. *Lepse*, which is only corded off from the public with "nuclear hazard" symbols, is packed full of partly dismantled, but highly active fuel rods. The ship is contaminated to a level that the entire vessel must be treated a nuclear waste.<sup>99</sup>

The Norwegian environmental group Bellona has been credited with the idea of creating a cement dry dock in which to seal the ship. Bellona piloted the project in order to make safe some of the nuclear waste stored in the region. Fear of the ship, *Lepse*, capsizing or sinking in the harbor or even worse, an accident causing a chain reaction, prompted the group to attack the problem. This idea was decided on after the rejection of two other options. First, the idea was to cut the ship into smaller pieces and transport to other storage units, however, more than 5,000 people would have been needed to prevent anyone from being exposed above the permitted limits. The second idea entailed towing

---

<sup>98</sup>Thomas Nilsen and Nils Bohmer, "Sources of Radioactive Contamination in Murmansk and Arkhangelsk Counties," Bellona Report Vol. 1, 1994, p. 49.

<sup>99</sup>Ole Mathismoen, "Project to Make Safe Murmansk Nuclear Waste Ship," *Aftenposten*, October 3, 1994, p. 3.

the ship to the southern tip of Novaya Zemlya where a channel would be blasted into the permafrost and the ship would then be covered. The former was viewed as not feasible and the latter would have been too costly and was not permanent. The solution for the *Lepse* needed to be permanent since its contents must be classed as radioactive waste for 200,000 to 300,000 years. The permafrost idea would not have worked since the possibility of global warming or climate changes could affect the permafrost in the future.

Storage facilities on the Lista fjord are another potential hazard. Located just 70 kilometers from Norway, one of the two storage facilities for highly active nuclear waste is draining radioactive water directly into the fjord. The Russian Northern Fleet, which operates the storage facility, is unable to repair the buildings because the ship used to take the spent fuel rods away is out of commission. The ship, *Siverka*, is in such poor shape the Russian Navy fears it will sink if used.<sup>100</sup> The storage tanks in the area are filled with water and the fuel rods, hanging from an apparatus, are lowered into the water to cool. In 1986 there was a situation where several rods fell to the bottom of the tank because the apparatus holding them rusted away. Experts have warned that this situation could have triggered a nuclear chain reaction in the uranium. The specific tank in which this accident happened was supposed to be emptied and not used again, however, by 1989 this same storage unit contained as many as

---

<sup>100</sup>Ole Mathismoen, "Kola Nuclear Waste Storage Facility 'Leaking'," *Aftenposten*, February 11, 1995, p. 4.

10,000 spent fuel rods. The holes in all the tanks are so bad that they continually need to be refilled. The seriousness of the situation comes from the potential for a disastrous nuclear chain reaction if the rods fall down or, if the tank itself collapses. Western scientists know that these units do not meet international standards but have been unable to confirm this. "The Russian Navy is not giving the Russian nuclear inspectorate permission to inspect the facilities on Lista Fjord, even though it has been instructed to do so by President Boris Yeltsin to draw up a report on the state of the military storage facilities."<sup>101</sup> The Norwegian government does not see the leaks as an immediate threat to fishing in the Barents Sea, however, its greatest fear is a chain reaction if an accident occurs.

## **2. Barents and Kara Seas**

In 1992, a Russian scientist in Murmansk revealed that, contrary to official reports, the dumping of liquid and solid nuclear waste in the Barents Sea had been happening for nearly 30 years. These dumping sites were located several hundred miles off the coast of Norway in known fishing areas. Thousands of containers of solid radioactive waste from the Northern Fleet and icebreakers were dumped into the Barents Sea in sealed containers. In

---

<sup>101</sup>Ibid.

instances where the containers would not sink, Soviet seamen were said to have cut holes in the "sealed " containers so they would.<sup>102</sup>

Norwegian scientists have been conducting tests in the Barents and Norwegian Seas for several years and have only registered small amounts of radioactivity in the Barents Sea. This radioactivity in the Barents Sea was attributed to the fallout from Soviet nuclear tests and from the explosion that released a cloud of radioactive matter from the Chernobyl accident in 1986.<sup>103</sup> In 1993, a joint Russian-Norwegian research team visited the Barents and Kara Seas, to take samples and test for the presence of radioactive particles, the expedition was not allowed to approach any closer than 12 kilometers from the suspected dump sites as the Russian navy prohibited closer access.

In April 1989, the *Komsomolets*, a nuclear-powered submarine, caught fire and sank in approximately 1600 meters of water 310 miles off the coast of Norway. The reactor in the submarine is already leaking Cesium-137, a carcinogenic isotope, but, the immediate threat comes from the two nuclear-tipped torpedoes containing 28 lbs. of plutonium with a half life of 24,000 years and a toxicity so high that a speck can kill.<sup>104</sup> Concern surrounds the fact that the immanent leakage of this plutonium could enter the food chain and

---

<sup>102</sup>Tyler, Sec. A, p. 1, col. 1.

<sup>103</sup>Ibid.

<sup>104</sup>James O. Jackson, "Nuclear Time Bombs," *Time*, December 7, 1992, p. 44.

contaminate vast reaches of ocean as early as this year. Dutch and Norwegian scientists organized a "*Komsomolets* Foundation" and, in conjunction with the Norwegian environmental group Bellona, have pressed to gain international attention and cooperation in investigating the problem. Different suggestions on solutions to the problem have ranged from raising the submarine to encapsulating it with cement. Small submarines have been sent down to video the sunken wreck to assist in assessing the condition of the hull and the feasibility of raising it and, to see if they can assess the condition of the torpedoes. "The situation is difficult because (the submarine) is located on a slope," says Knute Eric Nilsson, a researcher with Bellona. "Moving it or raising it could cause it to break up."<sup>105</sup> A recent study by other scientists in the region indicated that ocean current flowing from the *Komsomolets* could end up in waters heavily fished by Norwegian, Canadian, Icelandic, and other trawler fleets.<sup>106</sup> An attempt to move the sunken submarine could cause a nuclear chain reaction or damage the torpedoes. Already, Bellona has taken a measure of radioactivity of 20 times higher than normal in one spot where the *Komsomolets* went down, this means it has already begun to leak.<sup>107</sup>

---

<sup>105</sup>"Radioactive Waste," *BNA International Environment Daily*, August 17, 1993.

<sup>106</sup>*Ibid.*

<sup>107</sup>Lorraine Millot, "A Cruise in the Atomic Sea," *World Press Review*, March 1993, vol. 40, no. 3, p. 20.

### 3. Novaya Zemlya

Novaya Zemlya is an archipelago where the Soviet Union conducted bomb tests, scuttled submarines, and disposed of waste containers. These two islands, used as the only nuclear-weapons testing range after the Soviets closed the testing ground in central Asia, are considered one of the most poisoned sites in the Arctic. Russia also used these islands as a nuclear garbage bin where it admitted to dropping 17,000 barrels of radioactive waste into the surrounding seas since 1964.<sup>108</sup>

In 1992, Russian and Western experts were allowed to take samples in the Kara Sea for the first time. Virtually no other independent testing has been allowed in the Kara Sea and along the coasts of Novaya Zemlya since this has been considered home waters by the Soviet Navy during the Cold War years.<sup>109</sup> The dumped nuclear reactors containing fuel rods are considered to present one of the greatest ecological hazards of all the sunken waste. Most of these reactors lie in shallow inlets at depths of only 20 to 50 meters with one in a depression of 300 meters off the coast of Novaya Zemlya. In every case, the reactor core suffered damage that prevented the removal of spent nuclear fuel. In all but one case, the reactor compartments were filled with a self-hardening polymer which was believed would isolate the fuel rods from seawater.<sup>110</sup>

---

<sup>108</sup>Jackson, p. 44.

<sup>109</sup>Tyler, Sec. A, p. 1, col. 1.

<sup>110</sup>Monastersky, p.310.

Results from another expedition to the region around Novaya Zemlya indicate that the nuclear testing has "impacted" the marine life within a 2,000 km radius. Nuclear testing on Novaya Zemlya is claimed to be the reason for the deaths of seals which died of cancer due to exposure of toxic and radioactive substances.<sup>111</sup>

#### **4. Yenisey and Ob Rivers**

Pollution emanating from the interior of Russia another source of contamination for the Arctic Ocean. Freshwater runoffs from rivers flowing north have been contaminated by waste water stored in reservoirs or ponds and direct dumping by nuclear and military facilities. Some scientists feel that a potential disaster could result from a dam break or a nuclear accident inland in which the rivers are contaminated and in turn, contaminate everything in the rivers path as it flows to the ocean.

Mayak, a nuclear weapons production site, suffered a nuclear accident in 1957. Reports of up to 120 million Ci of radioactive wastes from Mayak have accumulated in the water and sediments of nearby Lake Karachai. This represents nearly 50 times the waste dumped by the Soviet Union in the Arctic Ocean.<sup>112</sup> "As a result, the Bulletin of Atomic Scientists estimates that a person

---

<sup>111</sup>D.J. Bradley, "Radioactive Contamination of the Arctic Region, Baltic Sea, and the Sea of Japan from Activities in the Former Soviet Union," Pacific Northwest Laboratory. September 1992, p. 6.

<sup>112</sup>Monastersky, p.311.



can get a lethal dose of radiation in less than an hour just standing on the bank of the lake."<sup>113</sup> Nearby the Mayak facility, 200,000 Ci is stored in a collection of reservoirs that are in danger of overflowing the dams. The water from this region ultimately flows to the Arctic Ocean via the Ob River. Western scientists still know little about the extent of the pollution which flows from this and other military facilities in the region to the Arctic Ocean. The Techa River is a similar problem. After years of dumping, this river carries radioactive waste 100 miles where it empties into the Arctic.

These are just a few of the examples that are known to Western scientists and researchers. Until all the reports on weapons producing sites and storage facilities are revealed the full extent of the problem will remain unknown.

### **C. STORAGE FACILITIES**

The Russian Navy currently lacks the capability to store or dispose of the nuclear waste that it is generating from the ships it is operating. Additionally, Russia does not have the storage capacity, the technology nor the financial means to dismantle the nuclear ships and reactors. Many disarmed submarines and nuclear waste sit amidst the population in the port of Murmansk and is beginning to cause concern among many people. The vast majority of the storage units in the area are not up to international standards and should have been removed years ago. "Russia's current capacity to process waste is in the

---

<sup>113</sup>Hofeinz, p.110.

order of 1,200 cubic meters a year, whereas it should really be 5,000 cubic meters."<sup>114</sup>

#### **D. REMEDIATION**

Financially, the Russian military and government do not have the money to fund the cleanup of the pollution in the Arctic region which is estimated, by one source, to cost between 230 and 270 billion dollars.<sup>115</sup> Consequently, environmental cleanup is a very low priority. Other countries are willing to assist Russia in this task. The Scandinavian countries pledged more than \$200 million to renovate the nickel factories but, the total cost for the overhauling exceeds \$2 billion and it is not believed that Russia will come up with the remainder. A joint Norwegian and United States effort is contributing 1.6 million US dollars into building a nuclear waste processing plant in Murmansk and, Bellona has been responsible for establishing contacts and coordinating some of the first projects to attack the problems in the Kola Peninsula. The U.S. Congress appropriated \$10 million to the Department of Defense to assess the radioactive threat in the Arctic Ocean. Additionally, there is currently a tri-lateral working group between the United States, Norway, and Russia to establish a program to deal with the environmental problems in the Arctic.

---

<sup>114</sup>"Nuclear Pollution: Radioactivity Reaches Alarming Proportions in Northern Russia." *Europe Environment*, February 21, 1995, no. 499.

<sup>115</sup>*Ibid.*

Even with all the pledged assistance, Russia still seems to be dragging its feet when it comes to attacking the problem. Russian military leaders claim they do not even have the finances to dismantle the decommissioned submarines which will cost \$1 million each (a total of \$10 million in just 1995). But, when the budget battles begin, environmental cleanup is not what military leaders are interested in obtaining funding for. The civilians who are concerned about these problems do not have the political clout to get the funding needed.

Internationally, Norway, Sweden, the United States and the European Union have all allocated funds for environmental projects in the former Soviet Union. In 1995 alone, Norway proposed \$20 million for radiation protection, waste management and prevention of contamination of the sea.<sup>116</sup> Norway has also allocated approximately \$48 million for a project to help reduce the sulfur dioxide pollution from the nickel plants in the Kola Peninsula region. It is estimated that Sweden has spent about \$10 million on similar projects.<sup>117</sup> As of August 1995, the United States had committed \$55 million to support various programs that focus on the environment and health effects as a result of nuclear weapons production in the former Soviet Union. A contribution of ECU 55 million

---

<sup>116</sup>"Nuclear Safety: Concerns With Nuclear Facilities and Other Sources of Radiation in the Former Soviet Union," GAO Report RCED-96-4, November 1995, p. 32.

<sup>117</sup>Ibid.

was made by the European Union for Euro-Arctic cooperation projects, several of which will deal with nuclear safety.<sup>118</sup>

---

<sup>118</sup>"EU/Arctic: New Economic and Ecological Cooperation Launched."  
*Europe Environment*, October 20, 1995.

## IV. EURO-ATLANTIC ORGANIZATIONS

### A. OVERVIEW

"Norwegian foreign and security policy has taken account of the changes in the Euro-Atlantic security agenda. What Norway sees emerging is a policy which is a blend of older factors which remain relevant, and elements which have emerged in response to the new challenges."<sup>119</sup> Norway is stressing the concept of extended security to the European and international arena. One of the goals of Norway is to emphasize the cross-border nature of environmental pollution and the need for international cooperation. Assistance to developing countries, in this case Russia is included, in establishing environmental considerations into development plans will assist in controlling future problems. The establishment of broader security challenges has also resulted in the expansion of policies and institutions to deal with the changes. At the forefront of this new policy, Norway sees the protection of the fragile Arctic environment as a key element in its current and future foreign and security policies. Norway has spearheaded several bilateral and international efforts to bring attention to the Barents and Arctic regions.

---

<sup>119</sup>Siri Bjerke, Norwegian State Secretary, in a speech on "The Environment and Security in the North Atlantic Region," at Reykjavik, 7 September 1995.

The unstable situations in Russia, economically and politically, give rise to new challenges in dealing with Norway's neighbor to the East. The deplorable state of the Kola Peninsula region is one of the security tasks that Norway is currently faced with. The Russian government is incapable, financially, of making amends to the situation and Norway cannot afford to fund the cleanup alone. Likewise, the internal turmoil and political instability in Moscow draw attention from the periphery. Hence, issues which are of importance to local governments in the Barents Region are overlooked. The emphasis on establishing democracies in the former Soviet states must also include assistance in dealing with environmental problems. By establishing relationships with Russia in the Barents Region, Norway hopes to emphasize its environmental concerns while developing working relationships with Russia in other areas, including social and technological areas.

The establishment of relations with Russia in the Barents Region is not an entirely new concept. During the period 1814 to 1917, Russia and Norway traded along the northern Norwegian and northern Russian coasts in what was called the Pomor trade. Norwegian fishermen traded their catch for supplies of wood and grain provided by their Russian counterparts. Although the relationship between the two countries in this period was not totally without disagreements or a sense of distrust, differences were settled without major conflicts. Today, however, in the post-Cold War world, the Barents Region is different and the Kola Peninsula is one of many legacies of the former Soviet

Union. Once strictly controlled, politically and economically, by Moscow, the Kola Peninsula region thrived on the military establishment and contained the largest concentration of military power in the world.

Norway has historically preferred to address security and foreign policy issues diplomatically rather than militarily. In the post-Cold War world, Norway has emphasized environmental hazards, ethnic conflicts, and economic disparities as jeopardizing Norwegian security while downplaying military threats.<sup>120</sup> In keeping with this tradition, Norway has "constructed a network of nonmilitary cooperative relations concerning the exploitation of resources, protection of the environment, and management of economic activity in the Arctic."<sup>121</sup> By establishing itself as a Nordic bridge between the United States, Russia, NATO, and the EU, Norway's challenge is to form a connective tissue among the Atlantic, European, and Nordic frameworks for security cooperation in the new era.<sup>122</sup> To meet effectively these new challenges, institutions such as NATO and the EU are adapting their policies to include the development of programs which are intended to promote economic development.

---

<sup>120</sup>Holst cited in Johan Eriksson, "Security in the Barents Region: Interpretations and Implications of the Norwegian Barents Initiative," *Cooperation and Conflict*, vol. 30(3), 1995, p. 266.

<sup>121</sup>Holst, "NATO and the Northern Region: Security and Arms Control," p. 23.

<sup>122</sup>*Ibid.*, p. 28.

## B. THE BARENTS EURO-ARCTIC COUNCIL

The Barents Cooperation has served as one of the most important contributions to the region. Initiated by the Norwegians, the Barents Cooperation establishes a meeting place for regional cooperation, not a defined program of cooperation.<sup>123</sup> Established in January 1993 with the Kirkenes Declaration, the Barents Cooperation identifies seven main areas of cooperation: the environment, economic cooperation, science and technology, regional infrastructure, indigenous peoples, cultural relations and tourism. Norwegian Prime Minister Gro Brundtland sees the Barents Cooperation as "part of the general Western ambitions to integrate Russia into binding multilateral cooperation with a stable, democratic Europe, and to prevent political, economic and social chaos from erupting in its immediate vicinity."<sup>124</sup>

The Barents Cooperation is made up of a two-tier organizational system. The Barents Euro-Arctic Council, which convenes at the foreign or other minister level, is made up of the signers of the Kirkenes Declaration, the Nordic countries, Russia, and the European Commission. It is open to all interested parties and currently the UK, France, Germany, the Netherlands, Poland, the USA, Canada, Japan and Italy, all participate as observers. The Regional

---

<sup>123</sup>Holst, *The Barents Region: Institutions, Cooperation and Prospects*, p. 11.

<sup>124</sup>Gro Brundtland, Norwegian Prime Minister, *Norway and Europe*, remarks before a luncheon of the European Institute, 18 May, 1994.



Council is the supreme body in this cooperation. The council is made up of the political leadership of the counties of Finnmark, Troms and Nordland in Norway, Norrbotten in Sweden, Lappland in Finland, Murmansk, Archangel and the Republic of Karelia in Russia. A representative of the indigenous peoples of the region also participates in the council. The Regional Council is not subordinated to the Barents Euro-Arctic Council. The relationship between the two organizations is based on close cooperation between local and central authorities in each country.

Norwegian efforts in the Barents cooperation have clearly defined goals. The first is normalization: establishing relations across the boundaries between the Nordic countries and Russia. The second is stabilization. This involves a wish to promote cooperation and stability through measures to counteract and reduce military tension, reduce or eliminate environmental threats, and narrow the gap between the standards of living in the region. The final goal, regionalization, aims to create a multilateral framework for regional cooperation.<sup>125</sup>

The Norwegians view the issue of environmental protection as the most important task of the Barents Cooperation. The Russian Northern Fleet, industrial pollution, and nuclear activities pose the greatest hazards to the region. The rapid development and exploitation of resources in the region

---

<sup>125</sup>Holst, p.12.

during the Cold War was accomplished without regard to the environment. The Barents Cooperation aims to build programs focusing on reducing industrial emissions and radioactive contamination through cooperation between local governments. The Regional Council has not been able to accomplish this without difficulties.

The Norwegians see several risks associated with Russian society which may present challenges for the Barents Initiative. The instability in Russia, which resulted from the collapse of a centralized society and economy, has not been readily replaced with a functioning alternative. This lack of control makes Western investors skeptical. Anti-Western sentiments in Russia pose another problem. Murmansk is a city whose population for the past 70 years has been controlled by a central authority, Moscow. The main purpose of Murmansk was to support the Northern Fleet. Many inhabitants of Russia deplore the role of their state now in relation to the superpower status it held under Soviet rule, and this sparks arguments between proponents and opponents of democratization.

The differences in the cultures of the Norwegians and the Russians must also be dealt with. Norwegian and other Western assistance to Russian enterprises is often seen as a "capitalist" attempt to exploit them. Since they have no experience in a free market system and without control from Moscow, they are, for the first time in over 70 years, on their own. Finally, local

authorities are preoccupied with regional interests in the process of change in Russia. Concern is raised over local relationships with the central authority (Moscow) in terms of financial matters.<sup>126</sup>

### C. NATO

Norway sees NATO playing a different security role in the Euro-Arctic region than it did during the Cold War. Already the alliance has undergone important changes. The emphasis is no longer concentrated solely on defense against military threats, but now includes assisting the reform process in the new democracies. The North Atlantic Cooperation Council and Partnership for Peace are two vehicles that NATO will use in the further development of security relations between the Alliance, Russia and the former Soviet and Warsaw Pact states. These programs will serve to encourage some partners to adapt their military and political system with a view to subsequent NATO membership, and as a formal link for those which do not become members of NATO.<sup>127</sup>

Partnership for Peace (PFP) has provided assistance in the military aspect of the reform process. PFP opens the door for the development of close political and military ties. The North Atlantic Cooperation Council (NACC) has

---

<sup>126</sup>Runne Castberg, Olav Stokke, and Willy Ostreng, *The Dynamics of the Barents Region*, in Olav Stokke and Ola Tunander, eds., The Barents Region: Cooperation in Arctic Europe (London: SAGE Publications, PRIO, 1994), pp. 78-79.

<sup>127</sup>Bjorn Tore Godal, Norwegian Minister of Foreign Affairs, "Norway and European Perspectives." *ODIN*, August 29, 1995.

concentrated on the civilian aspect of reform including the management of pollution resulting from military activities.<sup>128</sup> This is of greatest interest to Norway in regards to the Barents Region.

Norway has chaired a committee, the Committee on the Challenges of Modern Society, through NATO/NACC which has already conducted a study on cross-border environmental problems emanating from defense-related installations and activities. Phase I of the study included comprehensive reports on radioactive contamination. Only defense-related sources of radioactive contamination affecting three areas, the Barents, Kara and Arctic Seas, the Baltic Sea area and the Black Sea area are included. Included in these areas were the catchment areas of all rivers that empty into the respective areas.<sup>129</sup> The findings of the study pinpointed the lack of proper storage facilities and the radioactive waste that will be accrued from future submarine decommissioning as the main problems facing Russia in the Kola Peninsula.

The expansion of NATO is an issue about which Norway has already voiced its concerns. Norway is concerned that, if not carried out in a way which would reinforce its objectives, a rapid expansion of NATO could result in the development of new dividing lines or the resurrection of old ones.<sup>130</sup> It knows full

---

<sup>128</sup>Ibid.

<sup>129</sup>"Cross-Border Environmental Problems Emanating From Defense-Related Installations and Activities," NATO/CCMS Report No. 204, April 1995, p. 1.

<sup>130</sup>Godal, October 28, 1995.

well that any design for a stable Europe must include Russia and that the development of relations between NATO and Russia is paramount. Rapid NATO expansion would generate Russian opposition if its security concerns were not taken into account. Efforts perceived as isolating Russia could lead to a new military build-up. Hence, all plans for future developments in European security must include a dialogue with Russia. Through PFP, Norway and NATO have joined with Russia in a joint naval exercise in the region. The exercise, called *Pomor*, concentrated on training naval forces from the former opposing military blocs for peace-keeping operations under the auspices of the United Nations.<sup>131</sup> Norwegians are also eager to include Russia in military-style exercises comprised of naval rescue exercises at sea and preparations for humanitarian actions.<sup>132</sup>

#### **D. THE EUROPEAN UNION**

The European Union (EU) will also play an integral part in Norway's future security concerns. Norwegian Foreign Minister Bjorn Tore Godal sees the "strengthening of political and economic ties between European countries as the best way of creating a more stable political climate, and the European Union has

---

<sup>131</sup>Johan Eriksson, "Security in the Barents Region: Interpretations and Implications of the Norwegian Barents Initiative." *Cooperation and Conflict*, vol.30(3), 1995, p. 273.

<sup>132</sup>"Allowing NATO on Russian Border Considered," *Aftenposten*, 3 October 95, p. 8.

become the key institution for European cooperation."<sup>133</sup> Even though the Norwegian referendum in November 1994 voted against joining the European Union, Sweden and Finland did join. The "no" vote in November 1994 was the second time a referendum on joining the EU had been voted down since Norway first rejected membership at the Union's founding in 1957. A fear of Norwegian fishing industry coming under severe fishing regulations and the loss of subsidies has been a significant contributing factor to the rejection of EU membership.

The accession of Sweden and Finland, the territory of the EU was increased by nearly 50 percent and borders directly with Russia. This makes it necessary for the EU to take into consideration Northern Europe in its security perspectives.

Planned expansion to the East in assisting the developing democracies of the former Soviet Union will add to the stability and prosperity of Europe and contribute to the overall security in Europe; and efforts need to be placed on not creating new divisions. Norway remains in contact with the EU through organizations like the European Economic Area (EEA), Western European Union (WEU), and NATO. The benefit of cooperation with the EU is its size and vast resources. With the accession of Finland to the EU, Russia has become an immediate neighbor of the EU, and the EU is now directly affected by the cross-

---

<sup>133</sup>Ibid.

border pollution. This will encourage cooperative developments between the Barents Initiative and European Union efforts to combine and not duplicate efforts.

#### **E. TACIS**

European Union-Russian cooperation has been built through implementation of the Technical Assistance to the Commonwealth of Independent States (TACIS) program. TACIS was conceived in December 1990 at a meeting of the European Council. It recognized that the economic reform initiatives that the Soviet Union was developing at the time were important in promoting peace and stability in Europe and the rest of the world. Many aspects of the TACIS program are similar to those of the Barents Cooperation except TACIS looks at all of the states of the former Soviet Union whereas the Barents Cooperation concentrates on the Barents Region. Through cooperation with the EU, Sweden and Finland, Norway will be able to bring attention to the northern region and stress the need for economic assistance from the EU through TACIS programs.

TACIS was formally established in July 1991 and is funded from the EU's budget and operates under its laws.<sup>134</sup> Since its beginnings in 1991 TACIS has strived to provide the know-how to create the means and conditions for accelerating the transition to a democratic market society. TACIS has three

---

<sup>134</sup>"What is Tacis? Partnerships and cooperation with the New Independent States," European Commission Report, p. 2.

main objectives: to support the transition towards the market economy and democracy, to develop partnerships and foster links and networks at all levels and, to integrate recipient countries into the world economy.<sup>135</sup>

TACIS works with the partner countries to identify priority sectors, which are currently:

- restructuring of state enterprises and private sector development
- agriculture
- infrastructure -energy, telecommunications and transport
- nuclear safety and environment
- public administration reform
- social services
- education

Environmental and nuclear safety issues are the areas that Norway is the most concerned with, and they are an increasing priority in EU/Russian relations.

TACIS is working to improve the security of the existing reactors and other civilian nuclear facilities. TACIS also builds environmental considerations into its projects across the range of all priority sectors and provides funding where environmental projects are essential to economic reform.<sup>136</sup> Three Environmental

---

<sup>135</sup>"The European Union and Russia: the Future Relationship," Communication of the European Communities, Brussels, 31 May 1995, p. 20.

<sup>136</sup>"What is Tacis? Partnerships and cooperation with the New Independent States," p. 2.



Centers for Administration and Technology (ECATs) have being or are been established in Russia to provide local government and industry with support in their efforts to find environmentally sound solutions to problems in their areas.<sup>137</sup> TACIS funds allocated for projects in 1991 to 1994 totaled ECU 1,757 million. ECU 321 million was allocated for nuclear safety and environmental programs.

#### **F. US SPONSORED PROGRAMS**

The United States Department of Defense's Office of Environmental Security has been watching Norway's progress in coping with Arctic Nuclear problems and as a result decided to spend no less than \$10 million to study, assess, and identify the disposal of nuclear waste by the former Soviet Union in the Arctic region. An additional \$20 million has been earmarked for this research. Efforts have also been devoted to research projects and expeditions in the Arctic seas to obtain water, sediment, and biological samples and tests for radiological contamination.<sup>138</sup>

The U.S. Department of Energy (DOE) is cooperating with former Soviet states to jointly conduct research to develop technologies in the areas of environmental restoration and waste management. The DOE, however, is not authorized to provide direct assistance to help remediate the nuclear waste

---

<sup>137</sup>"The European Union and Russia: the Future Relationship," p. 23.

<sup>138</sup>"Nuclear Safety: Concerns With Nuclear Facilities and Other Sources of Radiation in the Former Soviet Union," GAO Report RCED-96-4, November 1995, p. 32.

contamination in Russia. DOE and State Department officials say that such aid could be very costly given the magnitude of the contamination problems.<sup>139</sup> This program is still in its early stages of development. The Nuclear Regulatory Commission (NRC) and the Environmental Protection Agency (EPA) both provide assistance on establishing regulatory controls over radioactive waste, spent fuels and materials, and expanding waste processing facilities. Total expenditures by the United States through its various organizations (DOE, DOD, EPA, Dept. Of State and NRC) as of March 31, 1995 was \$26,874,000.<sup>140</sup>

The Environmental Technology Initiative is another effort by the United States to aid Russia with its environmental problems. This initiative concentrates on exporting American environmental technologies and remediation programs and techniques. Emphasis is placed on managing data collected from the field. The Russian North-Geographic Information Systems Project (RN-GIS) is one such initiative which would be used to establish a nation-wide system to catalog, analyze and store data on environmental pollution.<sup>141</sup> This system could potentially benefit the Russians in developing a program to manage the regions environmental problems before they get worse.

---

<sup>139</sup>Ibid., p. 13.

<sup>140</sup>Ibid., p. 31.

<sup>141</sup>Robert L. Dunaway, "Environmental Assistance as National Security Policy: Helping the Former Soviet Union Find Solutions to its Environmental Problems," INSS Occasional Paper 4, November 1995, p. 25.

## V. CONCLUSION

The political, economic and societal changes that encompass Europe present the opportunity for stability and peace. Norway has taken this opportunity to focus its security policy on issues which until now have been overshadowed by the Cold War.

Norwegian policy makers see their transatlantic ties as indispensable. The development over the years of a common set of values encompasses more than just security. Democracy, human rights, and economic development all lead to the same goal of European security. Norway will still depend on the United States as its major supplier of security. However, in the post-Cold War world traditional security concerns will be of less concern than before.

Norway's security concerns in post-Cold War Europe will continue, in part, to focus on Russia and its concentration of military assets on the Kola Peninsula. In addition, new security policies focusing on broader issues and not solely on preparing to repel a Russian invasion will be evident. For Norway, the environmental problems in Russia are so far reaching and affect so many countries that competition for attention and commitments from other nations will arise.<sup>142</sup> Efforts to tackle the environmental problems and to integrate Russia into binding multilateral cooperation with a stable Europe, and to prevent

---

<sup>142</sup>Holst, p. 19.

political, economic, and social chaos from erupting, will be the primary concern of Norway's security agenda. Coordination between the different international and bilateral institutions will enhance Norway's position as a Nordic bridge between the US, Russia, NATO, and the EU.

With these efforts, Norway has brought the issue of environmental degradation as a national security issue to the forefront. A primary goal of Norwegian policy is to help find a common solution to the world's ecological and resource problems.<sup>143</sup> Norway is accomplishing this by adapting the same institutions it used for defense security during the Cold War and using them as building blocks for programs to attack the environmental problems.

Disasters in the area of environmental security in the northern region could be one of the first of many non-military issues to test the effectiveness of the Atlantic Alliance in the northern region in the post-Cold War era. The effectiveness of institutions like NATO, the EU, and the Barents Euro-Arctic Council will determine whether or not programs to deal with such non-military security threats will be successful in the future

Ecological threats do not respect political boundaries. They require efforts to solutions that transcend boundaries, and international cooperation is

---

<sup>143</sup>Nytt fra Norge, "Questions regarding Norwegian Foreign Policy," *ODIN*, September 1995.

the apparent order of the day."<sup>144</sup> While present environmental problems are of concern, it is the future threats to the environment which is where the emphasis needs to be placed. As the protective containers and metal skins of these Russian reactors and barrels begin to corrode, they will spew their contents into the ocean. The feasibility of removing the reactors has been looked into, however, there is a chance that damage to a unit while trying to retrieve it could cause a leak or, worst case, cause a nuclear chain reaction. Efforts will need to be placed on sealing the already sunken units but, technology has not reached a point where there is the ability accomplish this and have it last for thousands of years. Likewise, the upgrading and repairs to existing storage facilities must be emphasized. Russia continues to generate radioactive waste without the storage facilities to accommodate it. A nuclear incident on land can have more immediate effects than one in the ocean. Permanent monitoring is required in order to detect any release of radioactivity at an early stage so that emergency measures can be implemented.<sup>145</sup>

The potential for civilian social unrest with the problems is gaining momentum as rumors about dumping, inadequate storage facilities, and hazards circulate faster than the actual verification of the situation. During the Soviet

---

<sup>144</sup>Simon Dalby, "Security, Modernity, Ecology: The Dilemmas of Post-Cold War Security Discourse," *Alternatives*, vol.17, 1992, p. 115.

<sup>145</sup>Johan Jorgen Holst, The Barents Region: Cooperation in Arctic Europe p. 17.

era, government officials categorically denied dumping hazardous waste and did not reveal the actual health and environmental threats the dumping could pose in the future hence, the public was not fully aware of the situation. Now that the public is more informed, they want action taken.

Once Russia accepts the responsibility for its past actions and makes a determined effort to make corrections, then the organizations which have offered their assistance, financial and technical, will be able to move forward. Working to ease the tensions and possibility of political conflict between Norway and Russia and ultimately preventing any future damage to the people of the region and the Arctic's fragile environment should be the goal. However, when the Russians continue to spend enormous amounts of money on operating a nuclear fleet and building new nuclear vessels, and then turn around and say that there is no funding available for building storage units and processing facilities, their credibility is questioned. There are still remains great strides to be taken in the area of environmental security in the northern region and it will ultimately require international cooperation to dispose of this threat.

## BIBLIOGRAPHY

- "Alliance With UK Sought on Euro-Defense Issue." *The Times*, 4 October 1995.
- "Allowing NATO on Russian Border Considered." *Aftenposten*, 3 October 1995.
- Archer, Clive and David Schrivener, Northern Waters: Security and Resource Issues (London & Sydney: Croom Helm, 1986).
- Bathurst, Robert. "Decaying Northern Fleet Threatens Norway." *Aftenposten Sondag*, 20 November 1994.
- "Better protection for our Arctic." *The Toronto Star*, March 18, 1993.
- Bjol, Erling, Nordic Security, Adelphi Paper no. 181 (London: International Institute for Strategic Studies, 1983).
- Bowermaster, Jon. "The last front of the Cold War; Arctic Regions." *The Atlantic*, vol. 272, no. 5, November 1993.
- Bradley, D.J. "Radioactive Contamination of the Arctic Region, Baltic Sea, and the Sea of Japan from Activities in the Former Soviet Union," Pacific Northwest Laboratory, September 1992.
- Bratteli, Tone. "Norway spurs international environmental cooperation," *Norway Information*, November 1993.
- Brenchley, Frank. Norway and her Soviet Neighbor: NATO's Arctic Frontier, Conflict Studies no. 134 (London: Institute for the Study of Conflict, 1982).
- Burrows, William E. "Nuclear chaos; radioactive pollution in the former Soviet Union." *Popular Science* vol. 245, no. 2, August 1994.
- Cole, Paul M. and Hart, Douglas M. Northern Europe: Security Issues for the 1990s (Boulder and London: Westview Press and CSIS, Georgetown University, 1986).
- Cook, Paul J., ed. Change and Continuity in Europe's Northern Region: A Conference Report (Washington, D.C.: The Center for Strategic and International Studies, 1991).

- "Cross-Border Environmental Problems Emanating From Defense-Related Installations and Activities." NATO/CCMS Report No. 204, April 1995.
- Dalby, Simon. "Security, Modernity, Ecology: The Dilemmas of Post-Cold War Security Discourse." *Alternatives*, vol. 17, 1992.
- Ditlev-Simonsen, Per. "Co-operation between Norway and the USA." *NATO's Sixteen Nations*, vol. 35, no. 7, December 1990.
- Dreyer, Thorstein. "Higher priority to environmental measures in many sectors." *Norway Information*, March 1992.
- Dunaway, Robert L., Environmental Assistance as National Security Policy: Helping the Former Soviet Union Find Solutions to its Environmental Problems (USAFA, CO: INSS Occasional Paper 4, November 1995).
- Ellingsen, Ellmann, NATO and U.S. Maritime Strategy: Diverging Interests or Cooperative Effort (Oslo: The North Atlantic Committee, 1987).
- Ellingsen, Ellmann, Reinforcing the Northern Flank (Oslo: The North Atlantic Committee, 1988).
- Ellingsen, Ellmann, The Military Balance in Northern Europe 1993-1994 (Oslo: Norwegian Atlantic Committee, 1994).
- Ericksson, Johan, "Security in the Barents Region." *Cooperation and Conflict*, vol.30(3), 1995.
- Flynn, Gregory, ed., NATO's Northern Allies: The National Security Policies of Belgium, Denmark, The Netherlands, & Norway (Totowa, NJ: Rowman & Allanheld, 1985).
- Gleditsch, Nils Peter, "Defense Without Threat? The Future of Norwegian Military Spending." *Cooperation and Conflict*, vol.27(4), 1992.
- Greenfield, Kent Roberts, ed., Command Decisions (Washington DC: U.S. Army, Center of Military History, 1987).
- Greenhouse, Steven. "The Greening of American Diplomacy." *New York Times*, October 8, 1995.
- Godal, Bjorn Tore. "For Common Security in Europe: Norway at Intersection." *Herald Tribune*, 27 September 1995.



- Handler, Joshua. "Russian Navy Nuclear Submarine Safety, Construction, Defense Conversion, Decommissioning, and Nuclear Waste Disposal Problems." Trip Report: Greenpeace Visit to Moscow and Russian Far East July-November 1992, February 15, 1993.
- Hoffman, David. "Russia Says Ex-Officer Spied for Ecologists." *International Herald Tribune*, February 13, 1996.
- Hofheinz, Paul. "The New Threat: Pollution." *Fortune*, 27 July 1992.
- Holst, Johan Jorgen, ed., Five Roads to Nordic Security (Oslo: Universitetsforlaget, 1973).
- Holst, Johan J. "Norway's Search for a Nordpolitik." *Foreign Affairs*, vol. 60, no. 1, Fall 1981.
- Holst, Johan Jorgen. "From Arctic to Baltic--the strategic significance of Norway." *NATO's Sixteen Nations*, vol. 36, no. 3, May-June 1991.
- Holst, Johan Jorgen, ed., Norwegian Foreign Policy in the 1980s (Oslo: Norwegian University Press, 1985).
- Jackson, James O. "Nuclear Time Bombs." *Time*, December 7, 1992.
- Jacobsen, Carl G., ed., Strategic Power: USA/USSR (London: Macmillan, 1990).
- Josephson, Julian. "Cleanup in the Arctic." *Environmental Science & Technology*, vol. 27, no. 4, April 1993.
- Kelleher, Catherine M. and Gale A. Mattox, eds., Evolving European Defense Policies (D.C. Health and Company/Lexington, MA/Toronto: Lexington Books, 1987).
- Kemp, Ian. "Nordic appraisal." *Jane's Defense Weekly*, vol. 15, no. 13, March 30, 1991.
- Linden, Eugene. "The Rape of Siberia." *Time*, September 4, 1995.
- Lochen, Einar, Norway in European and Atlantic Co-operation (Oslo: Universitetsforlaget, 1964).

Lund, John, Don't Rock the Boat: Reinforcing Norway in Crisis and War (Santa Monica, CA: RAND Corporation, 1989).

"Make the Arctic a safer place; Polar region shouldn't be a nuclear dump." *The Gazette Montreal*, 28 February 1993.

Mathismoen, Ole. "Norwegian Yes to EU Ensures Funds for Kola Peninsula." *Lexis Nexus*, 14 October 1994.

Mathismoen, Ole. "Bellona Halts Nuclear Threat." *FBIS*, 3 October 1994.

Mathismoen, Ole. "The State Radiation Protection Agency on Nuclear Waste: Defends Offshore Dumping." *FBIS*, 4 October 1994.

Mathismoen, Ole. "Nuclear Leak 70 Km From Norway." *FBIS*, 11 February 1995.

Mathismoen, Ole. "Project to Make Safe Murmansk Nuclear Waste Ship." *Aftenposten*, October 3, 1994.

Mathismoen, Ole. "Kola Nuclear Waste Storage Facility 'Leaking'." *Aftenposten*, February 11, 1995.

Millot, Lorraine. "A cruise in the atomic sea (radioactive waste disposal in the Kara Sea)." *World Press Review*, vol. 40, no.3, March 1993.

Minott, Rodney Kennedy, U.S. Regional Force Application: The Maritime Strategy and Its Effect on Nordic Stability (Hoover Institute, 1988).

Monastersky, R., "Hazard from Soviet nuclear dumps assessed." *Science News*, vol. 143, May 15, 1993.

"Murmansk Official Confirms Theft of Radioactive Material." *La Repubblica*, 25 August 1994.

Myers, Kenneth A., North Atlantic Security: The Forgotten Flank, The Washington Papers no. 62 (Georgetown: CSIS, 1979).

Nilsen, Thomas and Nils Bohmer, "Sources of Radioactive Contamination in Murmansk and Arkhangelsk Counties," Bellona Report Vol. 1, 1994.

"Nuclear Pollution: Radioactivity Reaches Alarming Proportions in Northern Russia." *Europe Environment*, February 21, 1995.

- "Nuclear Safety: Concerns With Nuclear Facilities and Other Sources of Radiation in the Former Soviet Union." GAO Report RCED-96-4, November 1995.
- Olsen, Erik. "Nordic Harmony: Northern neighbors coordinate their defense." *Armed Forces Journal International*, vol. 132, no. 7, February 1995.
- Pederson, VAdm Rolf E. "New risks, new roles--maritime defense of northern Norway." *NATO's Sixteen Nations*, vol. 37, no. 1, 1992.
- Prytz, RAdm Kjell A. "Norway's Navy in multinational exercises in the north." *NATO's Sixteen Nations*, vol. 39, no. 1, 1994.
- "Radioactive Waste." *BNA International Environment Daily*, August 17, 1993.
- Rusi, Alpo M., After the Cold War: Europe's New Political Architecture (London: Macmillan Academic and Professional Ltd., 1991).
- Sauerwein, Brigitte. "Northern Security in a world of rapid changes." *International Defense Review*, vol. 22, no. 12, December 1989.
- Scrivener, David. "Border dispute in the Barents Sea." *Jane's Intelligence Review*, vol. 4, no. 6, June 1992.
- Seim, Capt Torstein. "Norwegian security policy-- a time for change?" *Naval War College Review*, vol. 45, no. 3, Summer 1992.
- Simon, Jeffrey, ed., NATO-WARSAW Pact Force Mobilization (Washington DC: The National Defense University Press, 1988).
- Soderlind, Rolf. "Norway: Oslo Urges West to Help Russia Clear Nuclear Waste." *Rueter News Service*, March 23, 1995.
- Spector, Michael. "One of the Most Polluted Places on Earth." *International Herald Tribune*, March 29, 1994.
- Stern, Eric K. "Bringing the Environment In: The Case for Comprehensive Security." *Cooperation and Conflict*, vol. 30(3), 1995.
- Stokke, Olav Schram and Ola Tunander, eds., The Barents Region: Cooperation in Arctic Europe (London: Sage Publications, PRIO, 1994).

Terry, James G., Factors Affecting the Military Environment of North Norway: Its History, International Relations, Physical Characteristics, and Balance of Military Forces (Santa Monica, CA: RAND Corporation, 1988).

"The Environment & National Security: The U.S. Navy's Capabilities and Requirements." A Study Prepared by: National Security Planning Associates, December 1993.

"The European Union and Russia: the Future Relationship." Communication of the European Communities, Brussels, 31 May 1995.

Till, Geoffrey, ed., Britain and NATO's Northern Flank (Houndmills, Basingstoke, Hampshire and London: The Macmillan Press Ltd., 1988).

Tyler, Patrick E. "Soviet's Secret Nuclear Dumping Causes Worry for Arctic Waters." *New York Times*, May 4, 1992.

Udgaard, Nils Morten, Great Power Politics and Norwegian Foreign Policy (Oslo: Universitetsforlaget, 1973).

Wetterqvist, Fredrik. "Scandinavia's coming winter." *Defense & Foreign Affairs Strategic Policy*, vol. 18, no. 12, December 1990.

Zoppo, Ciro Elliott, Nordic Security at the turn of the Twenty-first century (Westport: Greenwood Press, 1992).

## INITIAL DISTRIBUTION LIST

		No. Copies
1.	Defense Technical Information Center 8725 John J. Kingman Rd., STE 0944 Ft. Belvoir, VA 22060-6218	2
2.	Dudley Knox Library, Naval Postgraduate School 411 Dyer Rd. Monterey, CA 93943-5101	2
3.	Dr. Frank M. Teti Chairman, National Security Affairs (NS/Tt ) Naval Postgraduate School Monterey, CA 93943	1
4.	Ambassador Rodney Kennedy-Minott (Code NS/Mi) Naval Postgraduate School Monterey, CA 93943	1
5.	Dr. Jan S. Breemer (Code NS/Br) Naval Postgraduate School Monterey, CA 93943	1
6.	Hon. Sherri Wasserman-Goodman Deputy Under-Secretary of Defense for Environmental Security 3400 Defense Pentagon Washington, DC 20301-3400	1
7.	Leon Fuerth, Esq. Assistant to the Vice President for National Security Affairs O.E.O.B. Rm 298 The White House Washington, DC 20501	1

- |      |  |   |
|------|--|---|
| 8.   | Bowman Miller<br>Danielle Pool<br>INR/EUR Rm 4644<br>Bureau of Intelligence and Research<br>U.S. Department of State<br>Washington, DC 20520 | 1 |
| <br> |  |   |
| 9.   | LT Tim Grout, USN<br>831 Raymond Hill Road<br>Oakdale, CT 06370  | 2 |